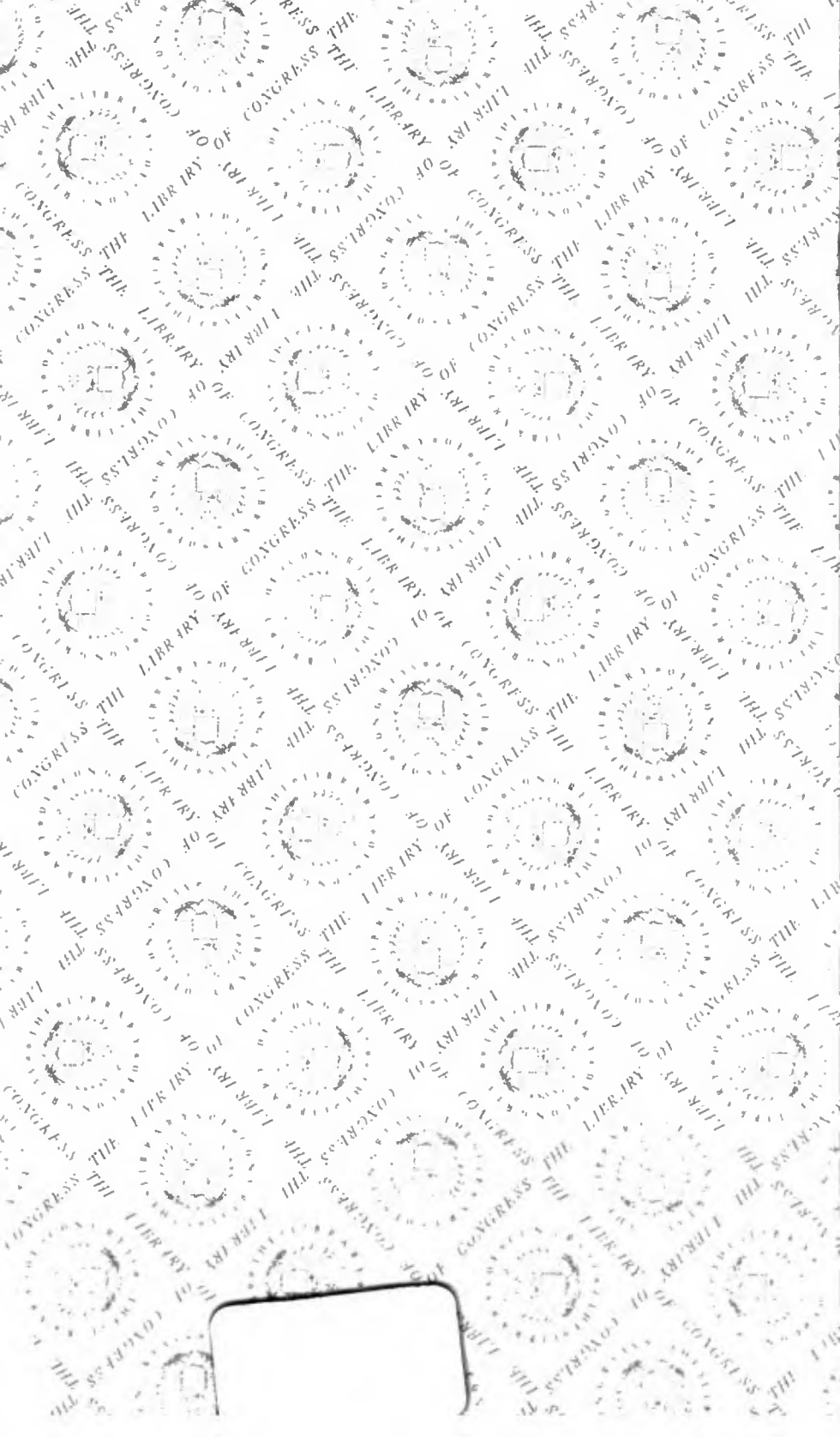

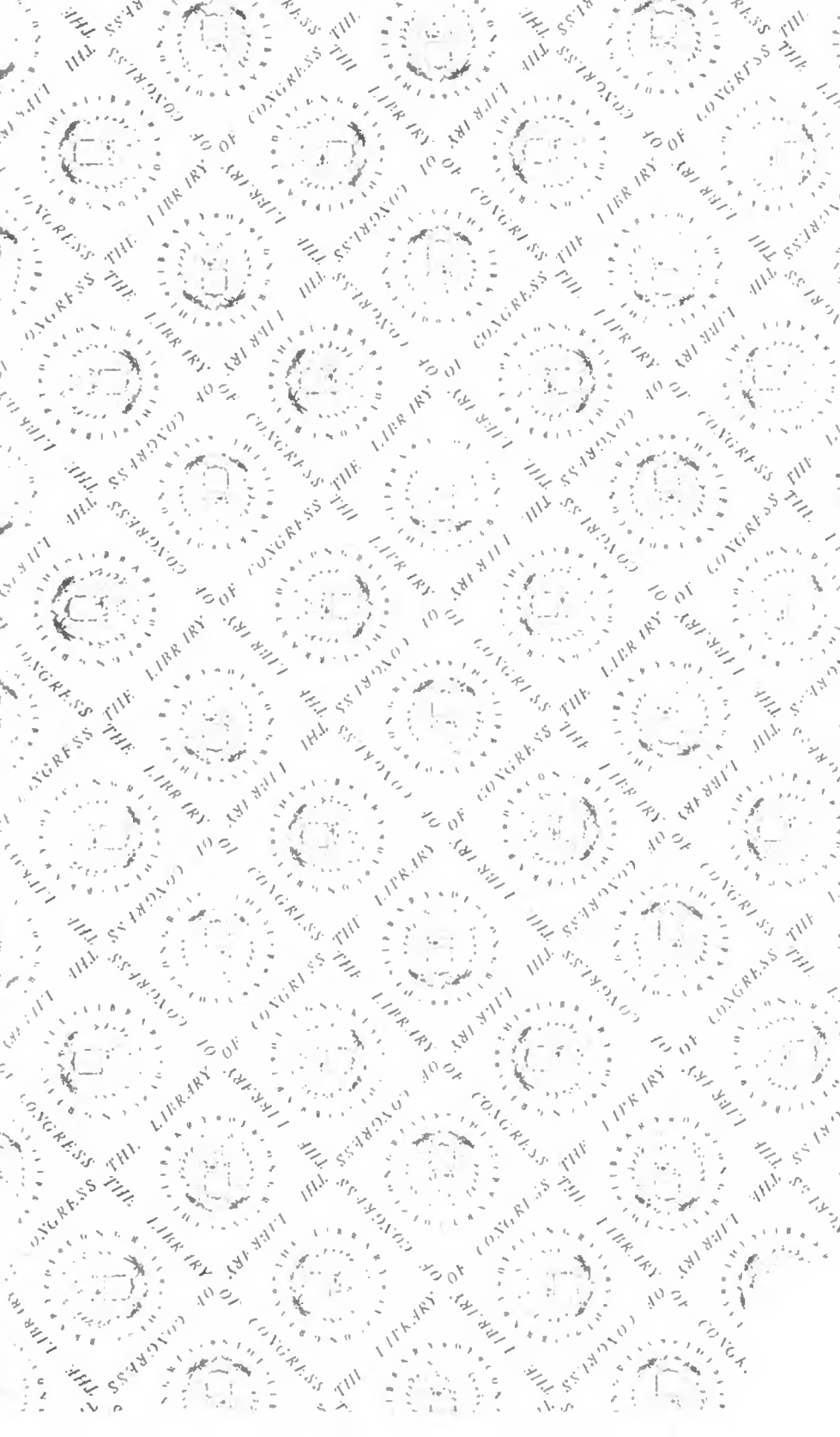

HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE AMENDMENTS OF 1965

HEARINGS

BEFORE THE

SUBCOMMITTEE ON PUBLIC HEALTH AND WELFARE

OF THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

HOUSE OF REPRESENTATIVES

EIGHTY-NINTH CONGRESS

FIRST SESSION

ON

H.R. 2366

A BILL TO AMEND THE PUBLIC HEALTH SERVICE ACT TO PROVIDE FOR A PROGRAM OF SCHOLARSHIPS FOR STUDENTS OF MEDICINE, OSTEOPATHY, AND DENTISTRY

H.R. 3141, H.R. 6000

BILLS TO AMEND THE PUBLIC HEALTH SERVICE ACT TO IMPROVE THE EDUCATIONAL QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY, TO AUTHORIZE GRANTS UNDER THAT ACT TO SUCH SCHOOLS FOR THE AWARDING OF SCHOLARSHIPS TO NEEDY STUDENTS, AND TO EXTEND EXPIRING PROVISIONS OF THAT ACT FOR STUDENT LOANS AND FOR AID IN CONSTRUCTION OF TEACHING FACILITIES FOR STUDENTS IN SUCH SCHOOLS AND SCHOOLS FOR OTHER HEALTH PROFESSIONS, AND FOR OTHER PURPOSES

H.R. 7385, H.R. 7806, H.R. 8751, H.R. 8805, H.R. 8811

BILLS TO AMEND THE PUBLIC HEALTH SERVICE ACT TO IMPROVE THE EDUCATIONAL QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, OPTOMETRY, AND OSTEOPATHY, TO AUTHORIZE GRANTS UNDER THAT ACT TO SUCH SCHOOLS FOR THE AWARDING OF SCHOLARSHIPS TO NEEDY STUDENTS, AND TO EXTEND EXPIRING PROVISIONS OF THAT ACT FOR STUDENT LOANS AND FOR AID IN CONSTRUCTION OF TEACHING FACILITIES FOR STUDENTS IN SUCH SCHOOLS AND SCHOOLS FOR OTHER HEALTH PROFESSIONS, AND FOR OTHER PURPOSES

JUNE 8 AND 9, 1965

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HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE AMENDMENTS OF 1965

TUESDAY, JUNE 8, 1965

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON PUBLIC
HEALTH AND WELFARE OF THE
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. Oren Harris (chairman) presiding.

The CHAIRMAN. The committee will come to order.

Today we have five bills on which the committee initiates hearings dealing with the problem of medical manpower.

They are H.R. 2366 by Mr. Bennett, providing scholarships for students of medicine, osteopathy, and dentistry; H.R. 3141, which is the prime proposal for these hearings under consideration that I introduced at the request of the administration; H.R. 6000 introduced by Mr. Fogarty which is identical to H.R. 3141; H.R. 7385 by Mr. Fogarty; and H.R. 7806 by Mr. Pepper, each of which modifies slightly the administration proposal. Also, I am advised that Mr. Clark, of Pennsylvania, and Mr. Hull, of Missouri, introduced legislation, H.R. 8805 and H.R. 8811, which are identical to the administration proposal H.R. 3141, and another bill by Mr. Bennett, H.R. 8751.

All of these bills establish a program of scholarships for students in the health professions.

With the exception of H.R. 2366, each of the bills would extend the existing program under which matching grants are made for the construction or rehabilitation of teaching facilities for the training of manpower in the health professions and to provide extensions of student loan programs currently in effect.

In addition, each of these five bills provides for grants to schools in the health professions for the improvement of the quality of their educational programs.

(The bills and reports thereon follow:)

[H.R. 2366, 89th Cong., 1st sess.]

A BILL To amend the Public Health Service Act to provide for a program of scholarships for students of medicine, osteopathy, and dentistry

Be it enacted by the Senate and House of Representation of the United States of America in Congress assembled, That title VII of the Public Health

Service Act is amended by redesignating part D thereof as part E and by inserting after part C thereof the following new part:

"PART D—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 740. (a) The Surgeon General shall make grants to each public or other nonprofit school of medicine, osteopathy, or dentistry (as defined in section 724), which is accredited as provided in section 721(b)(2), for scholarships to be awarded annually by such schools to students thereof.

"(b) The amount of the grant under subsection (a) to each such school shall be equal to $1,500 multiplied by (1) for the fiscal year ending June 30, 1966, one-fourth of the number of first-year students of such school; (2) for the fiscal year ending June 30, 1967, one-fourth of the number of first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, one-fourth of the number of first-year students, second-year students, and third-year students of such school; and (4) for each fiscal year thereafter, one-fourth of the number of students of such school.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a) only to individuals who have been accepted by them for enrollment as full-time first-year students in the case of awards from grants under subsection (a) for the fiscal year ending June 30, 1966; only to individuals who have been so accepted and individuals enrolled and in good standing as full-time second-year students in the case of such awards from such grants for the fiscal year ending June 30, 1967; and only to individuals so accepted or enrolled and individuals enrolled and in good standing as full-time third-year students in the case of such awards from such grants for the fiscal year ending June 30, 1968; and thereafter only to individuals who have been so accepted and individuals who are enrolled as full-time students in the school.

"(2) Scholarships awarded from grants under subsection (a) for any school year shall be awarded to talented students on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,000 for any year, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) The Surgeon General shall also make cost-of-education payments to schools which receive grants under subsection (a). Such payments to any school for a year shall be equal to $1,000 for each of its students who is awarded a scholarship from a grant under subsection (a) for such year, but not in excess of the number of students determined for such school for such year under clause (1), (2), (3), or (4), as the case may be, of subsection (b).

"(e) Grants under subsection (a) and payments under subsection (d) shall be made in accordance with regulations prescribed after consultation with the National Advisory Council on Education for the Health Professions (established by section 725). Such regulations shall include provisions relating to determination, for purposes of grants or payments for a fiscal year, of the number of students enrolled in a particular year-class on the basis of estimates, or on the basis of the number in such year-class in an earlier year, or on such other basis as he deems appropriate for making such determination, and including methods of making such determination when a year-class was not in existence in an earlier year at a school.

"(f) Grants under subsection (a) and payments under subsection (d) may be paid in advance or by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

[H.R. 3141, 89th Cong., 1st sess.]

A BILL To amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, and osteopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy students, and to extend expiring provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Amendments of 1965".

EDUCATIONAL IMPROVEMENT GRANTS AND SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

SEC. 2. (a) Title VII of the Public Health Service Act is amended by adding at the end thereof the following new parts:

"PART E—GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 770. There are authorized to be appropriated $20,000,000 for the fiscal year ending June 30, 1966, and such sums as may be necessary for each of the four succeeding fiscal years, for grants under this part to assist schools of medicine, dentistry, and osteopathy to improve the quality of their educational programs.

"BASIC IMPROVEMENT GRANTS

"SEC. 771. (a) The Surgeon General may make basic improvement grants as follows:

"(1) For the fiscal year ending June 30, 1966, each school of medicine, dentistry, or osteopathy whose application for a basic improvement grant for such year has been approved by the Surgeon General shall be paid the sum of $12,500 plus the product obtained by multiplying $250 by the number of full-time students in such school.

"(2) For each fiscal year in the period beginning July 1, 1966, and ending June 30, 1970, each such school whose application has been approved for such a grant for such year shall be paid the sum of $25,000 plus the product obtained by multiplying $500 by the number of full-time students in such school.

"(b) For purposes of this part and part F, regulations of the Surgeon General shall include provisions relating to determination of the number of students enrolled in a school, or in a particular year-class in a school, as the case may be, on the basis of estimates, or on the basis of the number of students enrolled in a school, or in a particular year-class in a school, in an earlier year, as the case may be, or on such basis as he deems appropriate for making such determination and shall include methods of making such determinations when a school or year-class was not in existence in an earlier year at a school.

"(c) For purposes of this part and part F, the term 'full-time students' (whether such term is used by itself or in connection with a particular year-class) means students pursuing a full-time course of study leading to a degree of doctor of medicine, doctor of dentistry, or an equivalent degree, or doctor of osteopathy.

"SPECIAL IMPROVEMENT GRANTS

"SEC. 772. From the sums appropriated under section 770 for any fiscal year and not required for making grants under section 771, the Surgeon General may make an additional grant for such year to any school of medicine, dentistry, or osteopathy which has an approved application therefor and for which an application has been approved under section 771 if he determines that the applicant needs additional financial assistance in order to strengthen its curriculum or to improve the quality of its education. No grant to any school under this section for any fiscal year may exceed $100,000 for the fiscal year ending June 30, 1966; $200,000 for the fiscal year ending June 30, 1967; $300,000 for the fiscal year ending June 30, 1968; or $400,000 for the fiscal year ending June 30, 1969, or the succeeding fiscal year.

"APPLICATIONS FOR GRANTS

"SEC. 773. (a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for basic or special grants under section 771 or 772 for any fiscal year must be filed.

"(b) To be eligible for a grant under this part, the applicant must (1) be a public or other nonprofit school of medicine, dentistry, or osteopathy, and (2) be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that the requirement of this clause (2) shall be deemed to be satisfied if, (A) in the case of a school which by reason of no, or an insufficient period of operation is not, at the time of application for a grant under this part, eligible for such accreditation, the Commissioner finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will meet the accreditation standards of such body or bodies prior to the beginning of the academic year following the normal graduation date of students who are in their first year of instruction at such school during the fiscal year in which the Surgeon General makes a final determination as to approval of the application, or (B) in the case of any other school, the Commissioner finds after such consultation and after consultation with the Surgeon General that there is reasonable ground to expect that, with the aid of a grant or grants under this part, having regard for the purposes of the grant sought, such school will meet such accreditation standards within a reasonable time.

"(c) The Surgeon General shall not approve or disapprove any application for a grant under this part except after consultation with the National Advisory Council on Medical and Dental Education (established by section 774).

"(d) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that the application meets the eligibility conditions set forth in subsection (b) of this section, sets forth plans for using the grants which the Surgeon General finds give reasonable promise of strengthening and improving the school's faculty and curriculum, contains such additional information as he may require to make the determinations required of him under this part and such assurances as he may find necessary to carry out the purposes of this part, and provides for such fiscal control and accounting procedures and reports, and access to the records of grant recipients, as he may require to assure proper disbursement of and accounting for Federal funds paid to the applicant under this part.

"(e) In considering applications for grants under section 772, the Surgeon General shall take into consideration the relative financial need of the applicant for such a grant, the relative effectiveness of the applicant's plan in strengthening and improving its faculty and curriculum and in contributing to an equitable geographical distribution of opportunities for high-quality training of physicians, dentists, and osteopaths; and such other factors as he, after consultation with the National Advisory Council on Medical and Dental Education, may deem relevant.

"NATIONAL ADVISORY COUNCIL ON MEDICAL AND DENTAL EDUCATION

"SEC. 774 (a) There is hereby established in the Public Health Service a National Advisory Council on Medical and Dental Education consisting of the Surgeon General, who shall be Chairman, and twelve members appointed without regard to the civil service laws by the Surgeon General with the approval of the Secretary of Health, Education, and Welfare, and such appointments may be made for specified staggered terms. The appointed members of the Council shall be selected from among leading authorities in the fields of medical and of dental education, respectively, except that not less than three of such members shall be selected from the general public.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part and part F, and in the review of applications under this part.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part or part F, for such periods, in addition to conference periods, as he may determine.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon Gen-

eral, shall be entitled to receive compensation at rates to be fixed by the Secretary but not exceeding $100 per day, including travel time; and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermitteutly.

"PART F—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 780. (a) The Surgeon General shall make grants as provided in this part to each public or other nonprofit school of medicine, osteopathy, or dentistry, which is accredited as provided in section 721(b)(1)(B) or section 773(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under subsection (a) to each such school shall be equal to $2,000 multiplied (1) for the fiscal year ending Juue 30, 1966, by one-tenth of the number of full-time first-year students of such school; (2) for the fiscal year ending June 30, 1967, by one-tenth of the number of full-time first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, by one-tenth of the number of full-time first-year students, second-year students, and third-year students of such school; and (4) for the fiscal year ending June 30, 1969, and for the succeeding fiscal year, by one-tenth of the number of full-time students of such school. For the fiscal year ending June 30, 1971, and for each of the two succeeding fiscal years, the grant under subsection (a) shall be such amount as may be necessary to enable such school to continue making payments under scholarship awards to students who initially received such awards out of grants made to the school for fiscal years ending prior to July 1, 1970.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a)—

"(A) only to individuals who have been accepted by them for enrollment as full-time first-year students, in the case of awards from such grants for the fiscal year ending June 30, 1966;

"(B) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year students, in the case of awards from such grants for the fiscal year ending June 30, 1967;

"(C) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year or third-year studeuts, in the case of awards from such grants for the fiscal year ending June 30, 1968;

"(D) only to individuals who have beeu so accepted, and individuals enrolled and in good standing as full-time students, in the case of awards from such grants for the fiscal year ending June 30, 1969, or for the succeeding fiscal year; and

"(E) only to individuals enrolled and in good standing as full-time students who initially received scholarship awards out of such grants for a fiscal year ending prior to July 1, 1970, in the case of awards from such grants for the fiscal year ending June 30, 1971, or the two succeeding fiscal years.

"(2) Scholarships from grants under subsection (a) for any school year shall be awarded to students, particularly students from low-income families, on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,500 for any year, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) Grants under subsection (a) shall be made in accordance with regulations prescribed after consultation with the National Advisory Council on Medical and Dental Education.

"(e) Grants under subsection (a) may be paid in advance or by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

(b) Section 724 of such Act (containing definitions) is amended by striking ont "As used in this part" and lnserting ln lieu thereof "As used ln this part and parts C, E, and F"; and section 740(a) of such Act is amended by striklng out "(as defined ln section 724)".

EXTENSION OF CONSTRUCTION PROGRAM FOR MEDICAL, DENTAL, AND OTHER HEALTH PROFESSION SCHOOLS

SEC. 3. (a) Effective with respect to appropriations for fiesal years beginning after June 30, 1966, sectlon 720 of such Act is amended to read as follows:

"SEC. 720. There are authorized to be appropriated for the fiscal year ending ing June 30, 1967, and for each of the four succeeding fiscal years, such sums as may be necessary for—

"(1) grants to assist in the construction of new teaching facilities for the trainlng of physicians, pharmacists, optometrists, podiatrists, or professional public lcalth personnel:

"(2) grants to assist in the construction of new teacbing faciilities for the training of dentists; and

"(3) grants to assist in the replacement or rehabiiitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, professional public lcalth personnel, or dentists.

Sums so appropriated shall remain avaiiable until expended."

(b) Subsection (a) of section 721 of such Act is amended to read as follows:

"(a) The Snrgeon General may from tlme to time set dates (not earlier than ln the fiscal year precedlng the year for which a grant is sougbt) by which applications for grants under this part for any fiscal year must be filed."

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

SEC. 4. (a) Subsection (b)(4) of section 740 of snch Act is amended by striking out "July 1, 1966" and inserting in lieu tbereof "July 1, 1971".

(b) Subsection (a) of section 741 of such Act is amended by striking out "may not exceed $2,000" and inserting ln iieu thereof "may not exceed $2,500".

(c) Subsection (a) of section 742 of such Act is amended (1) by lnserting "(other than section 744)" after "to carry out this part", and (2) by striking out that part of the first sentence that follows "June 30, 1966," and inserting in lieu tbereof the following: "and such sums as may be necessary for the fiscal year ending June 30, 1967, and each of the fonr succeeding fiscal years. There are furtber authorized to be appropriated to the Secretary such sums for the fiscal year ending June 30, 1972, and each of the two succeeding fiscal years as may be necessary to enable students who bave received a loan under this part for any academic year ending before July 1, 1971, to continue or complete their education."

(d) Section 743 of such Act is amended by striking out "1969" wherever it appears therein and inserting in lieu thereof "1974".

(e) Section 744 of such Act is amended by adding at tlie end thereof the following new sentences: "There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of tbis section, but not to exceed a total of $2,500,000. Loans made by the Surgeon General under this section shall mature within such period as may be determined by the Surgeon General to be appropriate in each case, but not exceeding fifteen years."

TECHNICAL AMENDMENTS

SEC. 5. (a) Clause (B) of section 721 (b)(1) of such Act (relating to the accreditation of new schools of medicine, etc.) is amended by (1) striking out ", npon completion of such facility," and (2) inserting the following after "meet the accreditation standards of such body or bodies": "(i) prior to the beginning of the academic year following the normal graduation date of the first entering class in such schooi or (ii) if later, upon completion of the project for which assistance is requested and other projects (if any) under construction or planned and to be commenced within a reasonable time."

(b) Clause (1) of section 843(f) of such Act (relating to accreditation of new schools of nursing), is amended by strlking out "new schooi" and the remainder of sucb clause and inserting in lieu thereof the following: "new school (which shall include a scbool that has not had a sufficient period of operation to be eligible for accreditation), (A) upon completion of such project and other

construction projects (if any) then under construction or planned and to be commenced within a reasonable time, or (B) if later, then prior to the beginning of the first academic year following the normal graduation date of the first entering class in such school;".

[H.R. 6000, 89th Cong., 1st sess.]

A BILL To amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, and osteopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy students, and to extend expiring provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Amendments of 1965".

EDUCATIONAL IMPROVEMENT GRANTS AND SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

SEC. 2. (a) Title VII of the Public Health Service Act is amended by adding at the end thereof the following new parts:

"PART E—GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 770. There are authorized to be appropriated $20,000,000 for the fiscal year ending June 30, 1966, and such sums as may be necessary for each of the four succeeding fiscal years, for grants under this part to assist schools of medicine, dentistry, and osteopathy to improve the quality of their educational programs.

"BASIC IMPROVEMENT GRANTS

"SEC. 771. (a) The Surgeon General may make basic improvement grants as follows:

"(1) For the fiscal year ending June 30, 1966, each school of medicine, dentistry, or osteopathy whose application for a basic improvement grant for such year has been approved by the Surgeon General shall be paid the sum of $12,500 plus the product obtained by multiplying $250 by the number of full-time students in such school.

"(2) For each fiscal year in the period beginning July 1, 1966, and ending June 30, 1970, each such school whose application has been approved for such a grant for such year shall be paid the sum of $25,000 plus the product obtained by multiplying $500 by the number of full-time students in such school.

"(b) For purposes of this part and part F, regulations of the Surgeon General shall include provisions relating to determination of the number of students enrolled in a school, or in a particular year-class in a school, as the case may be, on the basis of estimates, or on the basis of the number of students enrolled in a school, or in a particular year-class in a school, in an earlier year, as the case may be, or on such basis as he deems appropriate for making such determination, and shall include methods of making such determinations when a school or a year-class was not in existence in an earlier year at a school.

"(c) For purposes of this part and part F, the term 'full-time students' (whether such term is used by itself or in connection with a particular year-class) means students pursuing a full-time course of study leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, or doctor of osteopathy.

"SPECIAL IMPROVEMENT GRANTS

"SEC. 772. From the sums appropriated under section 770 for any fiscal year and not required for making grants under section 771, the Surgeon General may make an additional grant for such year to any school of medicine, dentistry, or osteopathy which has an approved application therefor and for which an application has been approved under section 771 if he determines that the applicant needs additional financial assistance in order to strengthen its curriculum or to

improve the quality of its education. No grant to any school under this section for any fiscal year may exceed $100,000 for the fiscal year ending June 30, 1966; $200,000 for the fiscal year ending June 30, 1967; $300,000 for the fiscal year ending June 30, 1968; or $400,000 for the fiscal year ending June 3, 1969, or the succeeding fiscal year.

"APPLICATIONS FOR GRANTS

"SEC. 773. (a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for basic or special grants under section 771 or 772 for any fiscal year must be filed.

"(b) To be eligible for a grant under this part, the applicant must (1) be a public or other nonprofit school of medicine, dentistry, or osteopathy, and (2) be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that the requirement of this clause (2) shall be deemed to be satisfied if, (A) in the case of a school which by reason of no, or an insufficient, period of operation is not, at the time of application for a grant under this part, eligible for such accreditation, the Commissioner finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will meet the accreditation standards of such body or bodies prior to the beginning of the academic year following the normal graduation date of students who are in their first year of instruction at such school during the fiscal year in which the Surgeon General makes a final determination as to approval of the application, or (B) in the case of any other school, the Commissioner finds after such consultation and after consultation with the Surgeon General that there is reasonable ground to expect that, with the aid of a grant or grants under this part, having regard for the purposes of the grant sought, such school will meet such accreditation standards within a reasonable time.

"(c) The Surgeon General shall not approve or disapprove any application for a grant under this part except after consultation with the National Advisory Council on Medical and Dental Education (established by section 774).

"(d) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that the application meets the eligibility conditions set forth in subsection (b) of this section, sets forth plans for using the grants which the Surgeon General finds give reasonable promise of strengthening and improving the school's faculty and curriculum, contains such additional information as he may require to make the determinations required of him under this part and such assurances as he may find necessary to carry out the purposes of this part, and provides for such fiscal control and accounting procedures and reports, and access to the records of grant recipients, as he may require to assure proper disbursement of and accounting for Federal funds paid to the applicant under this part.

"(e) In considering applications for grants under section 772, the Surgeon General shall take into consideration the relative financial need of the applicant for such a grant, the relative effectiveness of the applicant's plan in strengthening and improving its faculty and curriculum and in contributing to an equitable geographical distribution of opportunities for high-quality training of physicians, dentists, and osteopaths; and such other factors as he, after consultation with the National Advisory Council on Medical and Dental Education, may deem relevant.

"NATIONAL ADVISORY COUNCIL ON MEDICAL AND DENTAL EDUCATION

"SEC. 774. (a) There is hereby established in the Public Health Service a National Advisory Council on Medical and Dental Education consisting of the Surgeon General, who shall be Chairman, and twelve members appointed without regard to the civil service laws by the Surgeon General with the approval of the Secretary of Health, Education, and Welfare, and such appointments may be made for specified staggered terms. The appointed members of the Council shall be selected from among leading authorities in the fields of medical and of dental education, respectively, except that not less than three of such members shall be selected from the general public.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part and part F, and in the review of applications under this part.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part or part F, for such periods, in addition to conference periods, as he may determine.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at rates to be fixed by the Secretary but not exceeding $100 per day, including travel time; and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

"PART F—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 780. (a) The Surgeon General shall make grants as provided in this part to each public or other nonprofit school of medicine, osteopathy, or dentistry, which is accredited as provided in section 721(b)(1)(B) or section 773(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under subsection (a) to each school shall be equal to $2,000 multiplied, (1) for the fiscal year ending June 30, 1966, by one-tenth of the number of full-time first-year students of such school; (2) for the fiscal year ending June 30, 1967, by one-tenth of the number of full-time first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, by one-tenth of the number of full-time first-year students, second-year students, and third-year students of such school; and (4) for the fiscal year ending June 30, 1969, and for the succeeding fiscal year, by one-tenth of the number of full-time students of such school. For the fiscal year ending June 30, 1971, and for each of the two succeeding fiscal years, the grant under subsection (a) shall be such amount as may be necessary to enable such school to continue making payments under scholarship awards to students who initially received such awards out of grants made to the school for fiscal years ending prior to July 1, 1970.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a)—

"(A) only to individuals who have been accepted by them for enrollment as full-time first-year students, in the case of awards from such grants for the fiscal year ending June 30, 1966;

"(B) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year students, in the case of awards from such grants for the fiscal year ending June 30, 1967;

"(C) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year or third-year students, in the case of awards from such grants for the fiscal year ending June 30, 1968;

"(D) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time students, in the case of awards from such grants for the fiscal year ending June 30, 1969, or for the succeeding fiscal year; aud

"(E) only to individuals enrolled and in good standing as full-time students who initially received scholarship awards out of such grants for a fiscal year ending prior to July 1, 1970, in the case of awards from such grants for the fiscal year ending June 30, 1971, or the two succeeding fiscal years.

"(2) Scholarships from grants under subsection (a) for any school year shall be awarded to students, particularly students from low-income families, on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,500 for any year, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) Grants under subsection (a) shall be made in accordance with regulations prescribed after consultation with the National Advisory Council on Medical and Dental Education.

"(e) Grants under subsection (a) may be paid in advance or by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

(b) Section 724 of such Act (containing definitions) is amended by striking out "As used in this part" and inserting in lieu thereof "As used in this part and parts C, E, and F"; and section 740(a) of such Act is amended by striking out "(as defined in section 724)".

EXTENSION OF CONSTRUCTION PROGRAM FOR MEDICAL, DENTAL, AND OTHER HEALTH PROFESSION SCHOOLS

SEC. 3. (a) Effective with respect to appropriations for fiscal years beginning after June 30, 1966, section 720 of such Act is amended to read as follows:

"SEC. 720. There are authorized to be appropriated for the fiscal year ending June 30, 1967, and for each of the four succeeding fiscal years, such sums as may be necessary for—

"(1) grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, or professional public health personnel;

"(2) grants to assist in the construction of new teaching facilities for the training of dentists; and

"(3) grants to assist in the replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, professional public health personnel, or dentists.

Sums so appropriated shall remain available until expended."

(b) Subsection (a) of section 721 of such Act is amended to read as follows:

"(a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought (by which applications for grants under this part for any fiscal year must be filed."

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

SEC. 4. (a) Subsection (b)(4) of section 740 of such Act is amended by striking out "July 1, 1966" and inserting in lieu thereof "July 1, 1971".

(b) Subsection (a) of section 741 of such Act is amended by striking out "may not exceed $2,000" and inserting in lieu thereof "may not exceed $2,500".

(c) Subsection (a) of section 742 of such Act is amended (1) by inserting "(other than section 744)" after "to carry out this part", and (2) by striking out that part of the first sentence that follows "June 30, 1966" and inserting in lieu thereof the following: "and such sums as may be necessary for the fiscal year ending June 30, 1967, and each of the four succeeding fiscal years. There are further authorized to be appropriated to the Secretary such sums for the fiscal year ending June 30, 1972, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan under this part for any academic year ending before July 1, 1971, to continue or complete their education."

(d) Section 743 of such Act is amended by striking out "1969" wherever it appears therein and inserting in lieu thereof "1974."

(e) Section 744 of such Act is amended by adding at the end thereof the following new sentences: "There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this section, but not to exceed a total of $2,500,000. Loans made by the Surgeon General under this section shall mature within such period as may be determined by the Surgeon General to be appropriate in each case, but not exceeding fifteen years."

TECHNICAL AMENDMENTS

SEC. 5. (a) Clause (B) of section 721(b)(1) of such Act (relating to the accreditation of new schools of medicine, etc.) is amended by (1) striking out ", upon completion of such facility," and (2) inserting the following after "meet the accreditation standards of such bodies": "(i) prior to the beginning of the academic year following the normal graduation date of the first entering class in such school or (ii) if later, upon completion of the project for which assistance

is requested and other projects (if any) under construction or pianned and to be commenced within a reasonabie time."

(b) Clause (1) of section 843(f) of such Act (relating to accreditation of new schools of nursing), is amended hy striking out "new schooi" and the remainder of such ciause and inserting in iieu thereof the foiiowing: "new schooi (which shaii inciude a school that has not had a sufficient period of operation to be eligihie for accreditation), (A) upon compietion of such project and other construction projects (if any) then under construction or pianned and to he commenced within a reasonabie time, or (B) if iater, then prior to the beginning of the first academic year foiiowing the normai graduation date of the first entering ciass in such school;".

[H.R. 7385, 89th Cong., 1st sess.]

A BILL To amend the Puhiic Health Service Act to improve the educationni quaiity of schools of medicine, dentistry, optometry, and oestopathy, to authorize grnnts under that Act to such schools for tiie awarding of scholarships to needy students, and to extend expiring provisions of that Act for student ionns and for aid in construction of teaching facilities for students in such schools and schools for other heaith professions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Heaith Professions Educational Assistance Amendments of 1965".

EDUCATIONAL IMPROVEMENT GRANTS AND SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, ANN OSTEOPATHY

SEC. 2. (a) Titie VII of the Puhiic Heaith Service Act is amended by adding at the end thereof the following new parts:

"PART E—GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, OPTOMETRY AND OSTEOPATHY

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 770. There are authorized to be appropriated $20,000,000 for the fiscal year ending June 30, 1966, and such sums as may be necessary for each of the four succeeding fiscai years, for grants under this part to assist schools of medicine, dentistry, optometry, and osteopathy to improve the quaiity of their educational programs.

"BASIC IMPROVEMENT GRANTS

"SEC. 771. (a) The Surgeon General may make basic improvement grants as foiiows:

"(1) For the fiscal year ending June 30, 1966, each school of medicine, dentistry, optometry, or osteopathy whose application for a basic improvement grant for such year has been approved by the Surgeon Generai shaii be paid the sum of $12,500 pius the product obtained by multiplying $250 by the number of full-time students in such school.

"(2) For each fiscai year in the period beginning July 1, 1966, and ending June 30, 1970, each such schooi whose application has heen approved for such a grant for such year shaii be paid the sum of $25,000 plus the product obtained by muitipiying $500 by the number of full-time students in such schooi.

"(h) For purposes of this part and part F, regulations of the Surgeon General shaii inciude provisions reiating to determination of the numher of students enroiied in a schooi, or in a particular year-class in a schooi, as the case may be, on the basis of estimates, or on the basis of the number of students enroiied in a school, or in a particuiar year-class in a school, in an earlier year, as the case may be, or on such basis as he deems appropriate for making such determination, and shaii inciude methods of making such determinations when a schooi or a year-ciass was not in existence in an earlier year at a schooi.

"(c) For purposes of this part and part F, the term 'fuii-time students' (whether such term is used by itseif or in connection with a particular year-ciass) means students pursuing a fuii-time course of study ieading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, doctor of optometry or an equivaient degree, or doctor of osteopathy.

"SPECIAL IMPROVEMENT GRANTS

"SEC. 772. From the sums appropriated under section 770 for any fiscal year and not required for making grants under section 771, the Surgeon General may make an additional grant for such year to any school of medicine, dentistry, optometry, or osteopathy which has an approved application therefor and for which an application has been approved under section 771 if he determines that the applicant needs additional financial assistance in order to strengthen its curriculum or to improve the quality of its education. No grant to any school under this section for any fiscal year may exceed $100,000 for the fiscal year ending June 30, 1966; $200,000 for the fiscal year ending June 30, 1967; $300,000 for the fiscal year ending June 30, 1968; or $400,000 for the fiscal year ending June 30, 1969, or the succeeding fiscal year.

"APPLICATIONS FOR GRANTS

"SEC. 773. (a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for basic or special grants under section 771 or 772 for any fiscal year must be filed.

"(b) To be eligible for a grant under this part, the applicant must (1) be a public or other nonprofit school of medicine, optometry, dentistry, or osteopathy, and (2) be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that the requirement of this clause (2) shall be deemed to be satisfied if, (A) in the case of a school which by reason of no, or an insufficient period of operation is not, at the time of application for a grant under this part, eligible for such accreditation, the Commissioner finds after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will meet the accreditation standards of such body or bodies prior to the beginning of the academic year following the normal graduation date of students who are in their first year of instruction at such school during the fiscal year in which the Surgeon General makes a final determination as to approval of the application, or (B) in the case of any other school, the Commissioner finds after such consultation and after consultation with the Surgeon General that there is reasonable ground to expect that, with the aid of a grant or grants under this part, having regard for the purposes of the grant sought, such school will meet such accreditation standards within a reasonable time.

"(c) The Surgeon General shall not approve or disapprove any application for a grant under this part except after consultation with the National Advisory Council on Medical and Dental Education (established by section 774).

"(d) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that the application meets the eligibility conditions set forth in subsection (b) of this section, sets forth plans for using the grants which the Surgeon General finds give reasonable promise of strengthening and improving the school's faculty and curriculum, contains such additional information as he may require to make the determinations required of him under this part and such assurances as he may find necessary to carry out the purposes of this part, and provides for such fiscal-control and accounting procedures and reports, and access to the records of grant recipients, as he may require to assure proper disbursement of and accounting for Federal funds paid to the applicant under this part.

"(e) In considering applications for grants under section 772, the Surgeon General shall take into consideration the relative financial need of the applicant for such a grant, the relative effectiveness of the applicant's plan in strengthening and improving its faculty and curriculum and in contributing to an equitable geographical distribution of opportunities for high-quality training of physicians, dentists, optometrists, and osteopaths; and such other factors as he after consultation with the National Advisory Council on Medical, Optometric, and Dental Education, may deem relevant.

"NATIONAL ADVISORY COUNCIL ON MEDICAL OPTOMETRIC AND DENTAL EDUCATION

"SEC. 774. (a) There is hereby established in the Public Health Service a National Advisory Council on Medical Optometric and Dental Education consisting of the Surgeon General, who shall be Chairman, and twelve members appointed without regard to the civil service laws by the Surgeon General with

the approval of the Secretary of Health, Education, and Welfare, and such appointments may be made for specified staggered terms. The appointed members of the Council shall be selected from among leading authorities in the fields of medical optometric and of dental education, respectively, except that not less than three of such members shall be selected from the general public.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part and part F, and in the review of applications under this part.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part or part F, for such periods in addition to conference periods, as he may determine.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at rates to be fixed by the Secretary but not exceeding $100 per day, including travel time; and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"PART F—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 780. (a) The Surgeon General shall make grants as provided in this part to each public or other nonprofit school of medicine, osteopathy, optometry, or dentistry, which is accredited as provided in section 721(b)(1)(B) or section 773(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under subsection (a) to each such school shall be equal to $2,000 multiplied, (1) for the fiscal year ending June 30, 1966, by one-tenth of the number of full-time first-year students of such school; (2) for the fiscal year ending June 30, 1967, by one-tenth of the number of full-time first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, by one-tenth of the number of full-time first-year students, second-year students, and third-year students of such school; and (4) for the fiscal year ending June 30, 1969, and for the succeeding fiscal year, by one-tenth of the number of full-time students of such school. For the fiscal year ending June 30, 1971, and for each of the two succeeding fiscal years, the grant under subsection (a) shall be such amount as may be necessary to enable such school to continue making payments under scholarship awards to students who initially received such awards out of grants made to the school for fiscal years ending prior to July 1, 1970.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a)—

"(A) only to individuals who have been accepted by them for enrollment as full-time first-year students, in the case of awards from such grants for the fiscal year ending June 30, 1966;

"(B) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year students, in the case of awards from such grants for the fiscal year ending June 30, 1967;

"(C) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year or third-year students in the case of awards from such grants for the fiscal year ending June 30, 1968;

"(D) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time students, in the cause of awards from such grants for the fiscal year ending June 30, 1969, or for the succeeding fiscal year; and

"(E) only to individuals enrolled and in good standing as full-time students who initially received scholarship awards out of such grants for a fiscal year ending prior to July 1, 1970, in the case of awards from such grants for the fiscal year ending June 30, 1971, or the two succeeding fiscal years.

"(2) Scholarships from grants under subsection (a) for any school year shall be awarded to students, particularly studeuts from iow-income familiies, on tbe basis of need for financial assistance in pursuing a course of study at the school for such year. Any sucb scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the schooi making the award, but not to exceed $2,500 for any ycar, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) Grants unders subsection (a) shall be made in accordance with regulations prescribed after consultation witb the Nationai Advisory Council on Medical, Optometric, and Dental Education.

"(e) Grants under subsection (a) may be paid in advance or by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

(b) Section 724 of such Act (containing dcfinitions) is amended by striking out "As used in this part" and inserting in lieu tbereof "As used in this part and parts C, E, and F"; and section 740(a) of such Act is amended by striking out "(as defined in section 724)".

EXTENSION OF CONSTRUCTION PROGRAM FOR MEDICAL, DENTAL, AND OTHER HEALTH PROFESSION SCHOOLS

SEC. 3. (a) Effective with respect to appropriations for fiscal years beginning after June 30, 1966, section 720 of such Act is amended to read as follows:

"SEC. 720. There are authorized to be appropriated for the ficai year ending June 30, 1967, and for each of the four succeeding fiscal years, sucb sums as may be necessary for—

"(1) grants to assist in the construction of new teaching facilities for the tralning of physicians, pharmacists, optometrists, podiatrists, or professional public health personnel;

"(2) grants to assist in the construction of new teaching facilities for the training of dentists; and

"(3) grants to assist in the repiacement or rehabilitation of existing teacbing facilities for the training of physicians, pharmacists, optometrists, podiatrists, professional public health personnel, or dentists.

Sums so appropriated shall remain available until expended."

(b) Subsection (a) of section 721 of such Act is amended to read as follows:

"(a) The Surgeon Gencral may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for grants under this part for any fiscal year must be filed."

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

SEC. (a) Subsection (b)(4) of section 740 of such Act is amended by striking out "July 1, 1966" and inserting in lieu thereof "July 1, 1971".

(b) Subsection (a) of section 741 of such Act is amended by striking out "may not exceed $2,000" and inserting in lieu thereof "may not exceed $2,500".

(c) Subsection (a) of section 742 of such Act is amended (1) by inserting "(other than section 744)" after "to carry out this part", and (2) by striking out that part of the first sentence that follows "June 30, 1966," and inserting in lieu thereof the following: "and such sums as may be necessary for the fiscal year ending June 30, 1967, and each of the four succeeding fiscal years. There are further authorized to be appropriated to the Secretary such sums for the fiscal year ending June 30, 1972, and each of tbe two succeeding fiscal years as may be necessary to enable students who have received a ioan under this part for any academic year ending before July 1, 1971, to continue or complete their education."

(d) Section 743 of such Act is amended by striking out "1969" wherever it appears therein and inserting in lieu thereof "1974."

(e) Section 744 of such Act is amended by adding at the end thereof tbe following new sentences: "There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this section, but not to exceed a totai of $2,500,000. Loans made by the Surgeon General under this section shall mature within such period as may be determined by the Surgeon General to be appropriate in each case, but not exceeding fifteen years."

TECHNICAL AMENDMENTS

SEC. 5. (a) Clause (B) of section 721(b)(1) of such Act (relating to the accreditation of new schools of medicine, etc.) is amended by (1) striking out ", upon completion of such facility," and (2) inserting the following after "meet the accreditation standards of such bodies": "(1) prior to the beginning of the academic year following the normal graduation date of the first entering class in such school or (ii) if later, upon completion of the project for which assistance is requested and other projects (if any) under construction or planned and to be commenced within a reasonable time."

(b) Clause (1) of section 843(f) of such Act (relating to accreditation of new schools of nursing), is amended by striking out "new school" and the remainder of such clause and inserting in lieu thereof the following: "new school (which shall include a school that has not had a sufficient period of operation to be eligible for accreditation), (A) upon completion of such project and other construction projects (if any) then under construction or planned and to be commenced within a reasonable time, or (B) if later, then prior to the beginning of the first academic year following the normal graduation date of the first entering class in such school;".

[H.R. 7806, 89th Cong., 1st sess.]

A BILL To amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, optometry, and osteopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy students, and to extend expiring provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Amendments of 1965".

EDUCATIONAL IMPROVEMENT GRANTS AND SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

SEC. 2. (a) Title VII of the Public Health Service Act is amended by adding at the end thereof the following new parts:

"PART E—GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, OPTOMETRY, AND OSTEOPATHY

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 770. There are authorized to be appropriated $20,000,000 for the fiscal year ending June 30, 1966, and such sums as may be necessary for each of the four succeeding fiscal years, for grants under this part to assist schools of medicine, dentistry, optometry, and osteopathy to improve the quality of their educational programs.

"BASIC IMPROVEMENT GRANTS

"SEC. 771. (a) The Surgeon General may make basic improvement grants as follows:

"(1) For the fiscal year ending June 30, 1966, each school of medicine, dentistry, optometry, or osteopathy whose application for a basic improvement grant for such year has been approved by the Surgeon General shall be paid the sum of $12,500 plus the product obtained by multiplying $250 by the number of full-time students in such school.

"(2) For each fiscal year in the period beginning July 1, 1966, and ending June 30, 1970, each such school whose application has been approved for such a grant for such year shall be paid the sum of $25,000 plus the product obtained by multiplying $500 by the number of full-time students in such school.

"(b) For purposes of this part and part F, regulations of the Surgeon General shall include provisions relating to determination of the number of students enrolled in a school, or in a particular year-class in a school, as the case may be, on the basis of estimates, or on the basis of the number of students enrolled in a school, or in a particular year-class in a school, in an earlier year, as the case may be, or on such basis as he deems appropriate for making such determination, and shall include methods of making such determinations when a school or a year-class was not in existence in an earlier year at a school.

"(c) For students of this part and part F, the term 'full-time students' (whether such term is used by itself or in connection with a particular year-class) means students pursuing a full-time course of study leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, doctor of optometry or an equivalent degree, or doctor of osteopathy.

"SPECIAL IMPROVEMENT GRANTS

"SEC. 772. From the sums appropriated under section 770 for any fiscal year and not required for making grants under section 771, the Surgeon General may make an additional grant for such year to any school of medicine, dentistry, optometry, or ostepathy which has an approved application therefor and for which an application has been approved under section 771 if he determines that the applicant needs additional financial assistance in order to strengthen its curriculum or to improve the quality of its education. No grant to any school under this section for any fiscal year may exceed $100,000 for the fiscal year ending June 30, 1966; $200,000 for the fiscal year ending June 30, 1967; $300,000 for the fiscal year ending June 30, 1968; or $400,000 for the fiscal year ending June 30, 1969, or the succeeding fiscal year.

"APPLICATIONS FOR GRANTS

"SEC. 773. (a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for basic or special grants under section 771 or 772 for any fiscal year must be filed.

"(b) To be eligible for a grant under this part, the applicant must (1) be a public or other nonprofit school of medicine, optometry, dentistry, or osteopathy, and (2) be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that the requirement of this clause (2) shall be deemed to be satisfied if, (A) in the case of a school which by reason of no, or an insufficient period of operation is not, at the time of application for a grant under this part, eligible for such accreditation, the Commissioner finds after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will meet the accreditation standards of such body or bodies prior to the beginning of the academic year following the normal graduation date of students who are in their first year of instruction at such school during the fiscal year in which the Surgeon General makes a final determination as to approval of the application, or (B) in the case of any other school, the Commissioner finds after such consultation and after consultation with the Surgeon General that there is reasonable ground to expect that, with the aid of a grant or grants under this part, having regard for the purposes of the grant sought, such school will meet such accreditation standards within a reasonable time.

"(c) The Surgeon General shall not approve or disapprove any application for a grant under this part except after consultation with the National Advisory Council on Medical and Dental Education (established by section 774).

"(d) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that the application meets the eligibility conditions set forth in subsection (b) of this section, sets forth plans for using the grants which the Surgeon General finds give reasonable promise of strengthening and improving the school's faculty and curriculum, contains such additional information as he may require to make the determinations required of him under this part and such assurances as he may find necessary to carry out the purposes of this part, and provides for such fiscal-control and accounting procedures and reports, and access to the records of grant recipients, as he may require to assure proper disbursement of and accounting for Federal funds paid to the applicant under this part.

"(e) In considering applications for grants under section 772, the Surgeon General shall take into consideration the relative financial need of the applicant for such a grant, the relative effectiveness of the applicant's plan in strengthening and improving its faculty and curriculum and in contributing to an equitable geographical distribution of opportunities for high-quality training of physicians, dentists, optometrists, and osteopaths; and such other factors as he after consultation with the National Advisory Council on Medical, Optometric, and Dental Education, may deem relevant.

"NATIONAL ADVISORY COUNCIL ON MEDICAL OPTOMETRIC AND DENTAL EDUCATION

"SEC. 774. (a) There is hereby established in the Public Health Service a National Advisory Council on Medical Optometric and Dental Education consisting of the Surgeon General, who sball be Chairman, and twelve members appointed without regard to the civil service laws by the Surgeon General wlth the approval of the Secretary of Health, Education, and Welfare, and such appointments may be made for specified staggered terms. The appointed members of the Council shall be selected from among leading authoritles in the fields of medical optometric and of dental education, respectively, except tbat not less than three of such members shall be selected from the general public.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to the pollcy matters arising in the administration of this part and part F, and in the revlew of applications under this part.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection wlth matters related to the administratiod of this part or part F, for such periods, in addition to conference periods, as he may determine.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at rates to be fixed by the Secretary but not exceeding $100 per day, including travel time; and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"PART F—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OPTOMETRY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 780. (a) The Surgeon General shall make grants as provided in this part to each public or other nonprofit school of medicine, osteopathy, optometry, or dentistry, which is accredited as provided in sectlon 721(b)(1)(B) or section 773(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under section (a) to each such scbool shall be equal to $2,000 multiplied, (1) for the fiscal year ending June 30, 1966, by one-tenth of the number of full-time first-year students of such school; (2) for the fiscal year endlng June 30, 1967, by one-tenth of the number of full-tlme first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, by one-tenth of the number of full-tlme first-year students, second-year students, and third-year students of such school; and (4) for the fiscal year endlng June 30, 1969, and for the succeedlng fiscal year, by one-tenth of the number of full-time students of sucb school. For the fiscal year ending June 30, 1971, and for each of the two succeedlng fiscal years, the grant under subsection (a) shall be such amount as may be necessary to enable such school to continue making payments under scholarship awards to students who initially received such awards out of grants made to the school for fiscal years ending prior to July 1, 1970.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a)—

"(A) only to indlvlduals who have been accepted by them for enrollment as full-time first-year students, in the case of awards from such grants for the fiscal year ending June 30, 1966;

"(B) only to individuals who have been so accepted, and indlvlduals enrolled and in good standlng as full-tlme second-year students, in the case of awards from such grants for the fiscal year ending June 30, 1967;

"(C) only to individuals who bave been so accepted, and individuals enrolled and in good standing as full-time second-year or third-year students, in the case of awards from such grants for the fiscal year ending June 30, 1968;

"(D) only to individuals who have been so accepted, and indlvlduals enrolled and in good standlng as full-tlme students, in the case of awards from

such grants for the fiscal year ending June 30, 1969, or for the succeeding fiscal year; and

"(E) only to individuals enrolled and in good standing as full-time students who initially received scholarship awards out of such grants for a fiscal year ending prior to July 1, 1970, in the case of awards from such grants for the fiscal year ending June 30, 1971, or the two succeeding fiscal years.

"(2) Scholarships from grants under subsection (a) for any school year shall be awarded to students, particularly students from low-income families, on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,500 for any year, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) Grants under subsection (a) shall be made in accordance with regulations prescribed after consultation with the National Advisory Council on Medical, Optometric, and Dental Education.

"(e) Grants under subsection (a) may be paid in advance or by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

(b) Section 724 of such Act (containing definitions) is amended by striking out "As used in this part" and inserting in lieu thereof "As used in this part and parts C, E, and F"; and section 740(a) of such Act is amended by striking out "(as defined in section 724)".

EXTENSION OF CONSTRUCTION PROGRAM FOR MEDICAL, DENTAL, AND OTHER HEALTH PROFESSIONAL SCHOOLS

SEC. 3. (a) Effective with respect to appropriations for fiscal years beginning after June 30, 1966, section 720 of such Act is amended to read as follows:

"SEC. 720. There are authorized to be appropriated for the fiscal year ending June 30, 1967, and for each of the four succeeding fiscal years, such sums as may be necessary for—

"(1) grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, or professional public health personnel;

"(2) grants to assist in the construction of new teaching facilities for the training of dentists; and

"(3) grants to assist in the replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, professional public health personnel, or dentists.

Sums so appropriated shall remain available until expended."

(b) Subsection (a) of section 721 of such Act is amended to read as follows:

"(a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for grants under this part for any fiscal year must be filed."

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

SEC. 4. (a) Subsection (b)(4) of section 740 of such Act is amended by striking out "July 1, 1966" and inserting in lieu thereof "July 1, 1971".

(b) Subsection (a) of section 741 of such Act is amended by striking out "may not exceed $2,000" and inserting in lieu thereof "may not exceed $2,500".

(c) Subsection (a) of section 742 of such Act is amended (1) by inserting "(other than section 744)" after "to carry out this part", and (2) by striking out that part of the first sentence that follows "June 30, 1966," and inserting in lieu thereof the following: "and such sums as may be necessary for the fiscal year ending June 30, 1967, and each of the four succeeding fiscal years. There are further authorized to be appropriated to the Secretary such sums for the fiscal year ending June 30, 1972, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan under this part for any academic year ending before July 1, 1971, to continue or complete their education."

(d) Section 743 of such Act is amended by striking out "1969" wherever it appears therein and inserting in lieu thereof "1974."

(e) Section 744 of such Act is amended by adding at the end thereof the following new sentences: "There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this section, but not to exceed a total of $2,500,000. Loans made by the Surgeon General under this section shall mature within such period as may be determined by the Surgeon General to be appropriate in each case, but not exceeding fifteen years."

TECHNICAL AMENDMENTS

SEC. 5. (a) Clause (B) of section 721(b)(1) of such Act (relating to the accreditation of new schools of medicine, etc.) is amended by (1) striking out ", upon completion of such faculty," and (2) inserting the following after "meet the accreditation standards of such bodies"; "(i) prior to the beginning of the academic year following the normal graduation date of the first entering class in such school or (ii) if later, upon completion of the project for which assistance is requested and other projects (if any) under construction or planned and to be commenced within a reasonable time."

(b) Clause (1) of section 843(f) of such Act (relating to accreditation of new schools of nursing), is amended by striking out "new school" and the remainder of such clause and inserting in lieu thereof the following: "new school (which shall include a school that has not had a sufficient period of operation to be eligible for accreditation), (A) upon completion of such project and other construction projects (if any) then under construction or planned and to be commenced within a reasonable time, or (B) if later, then prior to the beginning of the first academic year following the normal graduation date of the first entering class in such school;".

[H.R. 8751, 89th Cong., 1st sess.]

A BILL To amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, optometry, and osteopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy students, and to extend expiring provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Amendments of 1965".

EDUCATIONAL IMPROVEMENT GRANTS AND SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

SEC. 2. (a) Title VII of the Public Health Service Act is amended by adding at the end thereof the following new parts:

"PART E—GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, OPTOMETRY, AND OSTEOPATHY

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 770. There are authorized to be appropriated $20,000,000 for the fiscal year ending June 30, 1966, and such sums as may be necessary for each of the four succeeding fiscal years, for grants under this part to assist schools of medicine, dentistry, optometry, and osteopathy to improve the quality of their educational programs.

"BASIC IMPROVEMENT GRANTS

"SEC. 771. (a) The Surgeon General may make basic improvement grants as follows:

"(1) For the fiscal year ending June 30, 1966, each school of medicine, dentistry, optometry, or osteopathy whose application for a basic improvement grant for such year has been approved by the Surgeon General shall be paid the sum of $12,500 plus the product obtained by multiplying $250 by the number of full-time students in such school.

"(2) For each fiscal year in the period beginning July 1, 1966, and ending June 30, 1970, each such school whose application has been approved for such a grant for such year shall be paid the sum of $25,000 plus the product obtained by multiplying $500 by the number of full-time students in such school.

"(b) For purposes of this part and part F, regulations of the Surgeon General shall include provisions relating to determination of the number of students enrolled in a school, or in a particular year-class in a school, as the case may be, on the basis of estimates, or on the basis of the number of students enrolled in a school, or in a particular year-class in a school, in an earlier year, as the case may be, or on such basis as he deems appropriate for making such determination, and shall include methods of making such determinations when a school or a year-class was not in existence in an earlier year at a school.

"(c) For purposes of this part and part F, the term 'full-time students' (whether such term is used by itself or in connection with a particular year-class) means students pursuing a full-time course of study leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, doctor of optometry or an equivalent degree, or doctor of osteopathy.

"SPECIAL IMPROVEMENT GRANTS

"SEC. 772. From the sums appropriated under section 770 for any fiscal year and not required for making grants under section 771, the Surgeon General may make an additional grant for such year to any school of medicine, dentistry, optometry, or osteopathy which has an approved application therefor and for which an application has been approved under section 771 if he determines that the applicant needs additional financial assistance in order to strengthen its curriculum or to improve the quality of its education. No grant to any school under this section for any fiscal year may exceed $100,000 for the fiscal year ending June 30, 1966; $200,000 for the fiscal year ending June 30, 1967; $300,000 for the fiscal year ending June 30, 1968; or $400,000 for the fiscal year ending June 3, 1969, or the succeeding fiscal year.

"APPLICATIONS FOR GRANTS

"SEC. 773. (a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for basic or special grants under section 771 or 772 for any fiscal year must be filed.

"(b) To be eligible for a grant under this part, the applicant must (1) be a public or other nonprofit school of medicine, optometry, dentistry, or osteopathy, and (2) be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that the requirement of this clause (2) shall be deemed to be satisfied if, (A) in the case of a school which by reason of no, or an insufficient period of operation is not, at the time of application for a grant under this part, eligible for such accreditation, the Commissioner finds after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will meet the accreditation standards of such body or bodies prior to the beginning of the academic year following the normal graduation date of students who are in their first year of instruction at such school during the fiscal year in which the Surgeon General makes a final determination as to approval of the application, or (B) in the case of any other school, the Commissioner finds after such consultation and after consultation with the Surgeon General that there is reasonable ground to expect that, with the aid of a grant or grants under this part, having regard for the purposes of the grant sought, such school will meet such accreditation standards within a reasonable time.

"(c) The Surgeon General shall not approve or disapprove any application for a grant under this part except after consultation with the National Advisory Council on Medical and Dental Education (established by section 774).

"(d) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that the application meets the eligibility conditions set forth in subsection (b) of this section, sets forth plans for using the grants which the Surgeon General finds give reasonable promise of strengthening and improving the school's faculty and curriculum, contains such additional information as he may require to make the determinations required of him under this part and such assurances as he may find necessary to carry out the purposes of this part, and provides for such fiscal control and accounting procedures and reports, and access to the records of grant recipients, as he may require to assure proper disbursement of and accounting for Federal funds paid to the applicant under this part.

"(e) In considering applications for grants under section 772, the Surgeon General shall take into consideration the relative financial need of the applicant for such a grant, the relative effectiveness of the applicant's plan in strengthening and improving its faculty and curriculum and in contributing to an equitable geographical distribution of opportunities for high-quality training of physicians, dentists, optometrists, and osteopaths; and such other factors as he after consultation with the National Advisory Council on Medical, Optometric, and Dental Education, may deem relevant.

"NATIONAL ADVISORY COUNCIL ON MEDICAL OPTOMETRIC AND DENTAL EDUCATION

"SEC. 774. (a) There is hereby established in the Public Health Service a National Advisory Council on Medical Optometric and Dental Education consisting of the Surgeon General, who shall be Chairman, and twelve members appointed without regard to the civil service laws by the Surgeon General with the approval of the Secretary of Health, Education, and Welfare, and such appointments may be made for specified staggered terms. The appointed members of the Council shall be selected from among leading authorities in the fields of medical optometric and of dental education, respectively, except that not less than three of such members shall be selected from the general public.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part and part F, and in the review of applications under this part.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part or part F, for such periods, in addition to conference periods, as he may determine.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at rates to be fixed by the Secretary but not exceeding $100 per day, including travel time; and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"PART F—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OPTOMETRY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 780. (a) The Surgeon General shall make grants as provided in this part to each public or other nonprofit school of medicine, osteopathy, optometry, or dentistry, which is accredited as provided in section 721(b)(1)(B) or section 773(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under subsection (a) to each such school shall be equal to $2,000 multiplied, (1) for the fiscal year ending June 30, 1966, by one-tenth of the number of full-time first-year students of such school; (2) for the fiscal year ending June 30, 1967, by one-tenth of the number of full-time first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, by one-tenth of the number of full-time first-year students, second-year students, and third-year students of such school; and (4) for the fiscal year ending June 30, 1969, and for the succeeding fiscal year, by one-tenth of the number of full-time students of such school. For the fiscal year ending June 30, 1971, and for each of the two succeeding fiscal years, the grant under subsection (a) shall be such amount as may be necessary to enable such school to continue making payments under scholarship awards to students who initially received such awards out of grants made to the school for fiscal years ending prior to July 1, 1970.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a)—

"(A) only to individuals who have been accepted by them for enrollment as full-time first-year students, in the case of awards from such grants for the fiscal year ending June 30, 1966;

"(B) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year students, in the case of awards from such grants for the fiscal year ending June 30, 1967;

"(C) only to individuals who have been so accepted,, and individuals enrolled and in good standing as full-time second-year or third-year students, in the case of awards from such grants for the fiscal year ending June 30, 1968;

"(D) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time students, in the case of awards from such grants for the fiscal year ending June 30, 1969, or for the succeeding fiscal year; and

"(E) only to individuals enrolled and in good standing as full-time students who initially received scholarship awards out of such grants for a fiscal year ending prior to July 1, 1970, in the case of awards from such grants for the fiscal year ending June 30, 1971, or the two succeeding fiscal years.

"(2) Scholarships from grants under subsection (a) for any school year shall be awarded to students, particularly students from low-income families, on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,500 for any year, as such school may determine the students needs for such year on the basis of his requirements and financial resources.

"(d) Grants under subsection (a) shall be made in accordance with regulations prescribed after consultation with the National Advisory Council on Medical, Optometric, and Dental Education.

"(e) Grants under subsection (a) may be paid in advance by by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

(b) Section 724 of such Act (containing definitions) is amended by striking out "As used in this part" and inserting in lieu thereof "As used in this part and parts C, E, and F"; and section 740(a) of such Act is amended by striking out "(as defined in section 724)".

EXTENSION OF CONSTRUCTION PROGRAM FOR MEDICAL, DENTAL, AND OTHER HEALTH PROFESSION SCHOOLS

SEC. 3. (a) Effective with respect to appropriations for fiscal year beginning after June 30, 1966, section 720 of such Act is amended to read as follows:

"SEC. 720. There are authorized to be appropriated for the fiscal year ending June 30, 1967, and for each of the four succeeding fiscal years, such sums as may be necessary for—

"(1) grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, or professional public health personnel;

"(2) grants to assist in the construction of new teaching facilities for the training of dentists; and

"(3) grants to assist in the replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, professional public health personnel, or dentists.

Sums so appropriated shall remain available until expended."

(b) Subsection (a) of section 721 of such Act is amended to read as follows:

"(a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for grants under this part for any fiscal year must be filed."

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

SEC. 4. (a) Subsection (b)(4) of section 740 of such Act is amended by striking out "July 1, 1966" and inserting in lieu thereof "July 1, 1971".

(b) Subsection (a) of section 741 of such Act is amended by striking out "may not exceed $2,000" and inserting in lieu thereof "may not exceed $2,500".

(c) Subsection (a) of section 742 of such Act is amended (1) by inserting "(other than section 744)" after "to carry out this part", and (2) by striking out that part of the first sentence that follows "June 30, 1966," and inserting in lieu thereof the following: "and such sums as may be necessary for the fiscal year ending June 30, 1967, and each of the four succeeding fiscal years. There are further authorized to be appropriated to the Secretary such sums for the fiscal

year ending June 30, 1972, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan under this part for any academic year ending before July 1, 1971, to continue or complete their education."

(d) Section 743 of such Act is amended by striking out "1969" wherever it appears therein and inserting in lieu thereof "1974."

(e) Section 744 of such Act is amended by adding at the end thereof the following new sentences: "There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this section, but not to exceed a total of $2,500,000. Loans made by the Surgeon General under this section shall mature within such period as may be determined by the Surgeon General to be appropriate in each case, but not exceeding fifteen years."

TECHNICAL AMENDMENTS

SEC. 5. (a) Clause (B) of section 721(b)(1) of such Act (relating to the accreditation of new schools of medicine, etc.) is amended by (1) striking out ", upon completion of such facility" and (2) inserting the following after "meet the accreditation of standards of such bodies": "(i) prior to the beginning of the academic year following the normal graduation date of the first entering class in such school or (ii) if later, upon completion of the project for which assistance is requested and other projects (if any) under construction or planned and to be commenced within a reasonable time."

(b) Clause (1) of section 843(f) of such Act (relating to accreditation of new schools of nursing), is amended by striking out "new school" and the remainder of such clause and inserting in lieu thereof the following: "new school (which shall include a school that has not had a sufficient period of operation to be eligible for accreditation), (A) upon completion of such project and other construction projects (if any) then under construction or planned and to be commenced within a reasonable time, or (B) if later, then prior to the beginning of the first academic year following the normal graduation date of the first entering class in such school;".

[H.R. 8805, 89th Cong., 1st sess.]

A BILL To amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, optometry, and osteopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy students, and to extend expiring provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Amendments of 1965".

EDUCATIONAL IMPROVEMENT GRANTS AND SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

SEC. 2. (a) Title VII of the Public Health Service Act is amended by adding at the end thereof the following new parts:

"PART E—GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, OPTOMETRY, AND OSTEOPATHY

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 770. There are authorized to be appropriated $20,000,000 for the fiscal year ending June 30, 1966, and such sums as may be necessary for each of the four succeeding fiscal years, for grants under this part to assist schools of medicine, dentistry, optometry, and osteopathy to improve the quality of their educational programs.

"BASIC IMPROVEMENT GRANTS

"SEC. 771. (a) The Surgeon General may make basic improvement grants as follows:

"(1) For the fiscal year ending June 30, 1966, each school of medicine, dentistry, optometry, or osteopathy whose application for a basic improvement

grant for such year has been approved by the Surgeon General shall be paid the sum of $12,500 plus the product obtained by multiplying $250 by the number of full-time students in such school.

"(2) For each fiscal year in the period beginning July 1, 1966, and ending June 30, 1970, each such school whose application has been approved for such a grant for such year shall be paid the sum of $25,000 plus the product obtained by multiplying $500 by the number of full-time students in such school.

"(b) For purposes of this part and part F, regulations of the Surgeon General shall include provisions relating to determination of the number of students enrolled in a school, or in a particular year-class in a school, as the case may be, on the basis of estimates, or on the basis of the number of students enrolled in a school, or in a particular year-class in a school, in an earlier year, as the case may be, or on such basis as he deems appropriate for making such determination, and shall include methods of making such determinations when a school or a year-class was not in existence in an earlier year at a school.

"(c) For purposes of this part and part F, the term 'full-time students' (whether such term is used by itself or in connection with a particular year-class) means students pursuing a full-time course of study leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, doctor of optometry or an equivalent degree, or doctor of osteopathy.

"SPECIAL IMPROVEMENT GRANTS

"SEC. 772. From the sums appropriated under section 770 for any fiscal year and not required for making grants under section 771, the Surgeon General may make an additional grant for such year to any school of medicine, dentistry, optometry, or osteopathy which has an approved application therefor and for which an application has been approved under section 771 if he determines that the applicant needs additional financial assistance in order to strengthen its curriculum or to improve the quality of its education. No grant to any school under this section for any fiscal year may exceed $100,000 for the fiscal year ending June 30, 1966; $200,000 for the fiscal year ending June 30, 1967; $300,000 for the fiscal year ending June 30, 1968; or $400,000 for the fiscal year ending June 30, 1969, or the succeeding fiscal year.

"APPLICATIONS FOR GRANTS

"SEC. 773. (a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for basic or special grants under section 771 or 772 for any fiscal year must be filed.

"(b) To be eligible for a grant under this part, the applicant must (1) be a public or other nonprofit school of medicine, optometry, dentistry, or osteopathy, and (2) be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that the requirement of this clause (2) shall be deemed to be satisfied if, (A) in the case of a school which by reason of no, or an insufficient period of operation is not, at the time of application for a grant under this part, eligible for such accreditation, the Commissioner finds after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will meet the accreditation standards of such body or bodies prior to the beginning of the academic year following the normal graduation date of students who are in their first year of instruction at such school during the fiscal year in which the Surgeon General makes a final determination as to approval of the application, or (B) in the case of any other school, the Commissioner finds after such consultation and after consultation with the Surgeon General that there is reasonable ground to expect that, with the aid of a grant or grants under this part, having regard for the purposes of the grant sought, such school will meet such accreditation standards within a reasonable time.

"(c) The Surgeon General shall not approve or disapprove any application for a grant under this part except after consultation with the National Advisory Council on Medical and Dental Education (established by section 774).

"(d) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that the application meets the eligibility conditions set forth in subsection (b) of this section, sets forth plans for using the grants which the Surgeon General finds give reasonable promise of strengthening and improving the school's faculty and curriculum,

contains such additional information as he may require to make the determinations required of him under this part and such assurances as he may find necessary to carry out the purposes of this part, and provides for such fiscal control and accounting procedures and reports, and access to the records of grant recipients, as he may require to assure proper disbursement of and accounting for Federal funds paid to the applicant under this part.

"(e) In considering applications for grants under section 772, the Surgeon General shall take into consideration the relative financial need of the applicant for such a grant, the relative effectiveness of the applicant's plan in strengthening and improving its faculty and curriculum and in contributing to an equitable geographical distribution of opportunities for high-quality training of physicians, dentists, optometrists, and osteopaths; and such other factors as he after consultation with the National Advisory Council on Medical, Optometric, and Dental Education, may deem relevant.

"NATIONAL ADVISORY COUNCIL ON MEDICAL OPTOMETRIC AND DENTAL EDUCATION

"SEC. 774. (a) There is hereby established in the Public Health Service a National Advisory Council on Medical Optometric and Dental Education consisting of the Surgeon General, who shall be Chairman, and twleve members appointed without regard to the civil service laws by the Surgeon General with the approval of the Secretary of Health, Education, and Welfare, and such appointments may be made for specified staggered terms. The appointed members of the Council shall be selected from among leading authorities in the fields of medical optometric and of dental education, respectively, except that not less than three of such members shall be selected from the general public.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part and part F, and in the review of applications under this part.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part or part F, for such periods, in addition to conference periods, as he may determine.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at rates to be fixed by the Secretary but not exceeding $100 per day, including travel time; and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"PART F—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OPTOMETRY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 780. (a) The Surgeon General shall make grants as provided in this part to each public or other nonprofit school of medicine, osteopathy, optometry, or dentistry, which is accredited as provided in section 721(b)(1)(B) or section 773(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under subsection (a) to each such school shall be equal to $2,000 multiplied, (1) for the fiscal year ending June 30, 1966, by one-tenth of the number of full-time first-year students of such schools; (2) for the fiscal year ending June 30, 1967, by one-tenth of the number of full-time first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, by one-tenth of the number of full-time first-year students, second-year students, and third-year students of such school; and (4) for the fiscal year ending June 30, 1969, and for the succeeding fiscal year, by one-tenth of the number of full-time students of such school. For the fiscal year ending June 30, 1971, and for each of the two succeeding fiscal years, the grant under subsection (a) shall be such amount as may be necessary to enable such school to continue making payments under scholarship awards to students who initially received such awards out of grants made to the school for fiscal years ending prior to July 1, 1970.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a)—

"(A) only to individuals who have been accepted by them for enrollment as full-time first-year students, in the case of awards from such grants for the fiscal year ending June 30, 1966;

"(B) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year students, in the case of awards from such grants for the fiscal year ending June 30, 1967;

"(C) only to individuals who have heen so accepted, and individuals enrolled and in good standing as full-time second-year or third-year students, in the case of awards from such grants for the fiscal year ending June 30, 1968;

"(D) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time students, in the case of awards from such grants for the fiscal year ending June 30, 1969, or for the succeeding fiscal year; and

"(E) only to individuals enrolled and in good standing as full-time students who initially received scholarship awards out of such grants for a fiscal year ending prior to July 1, 1970, in the case of awards from such grants for the fiscal year ending June 30, 1971, or the two succeeding fiscal years.

"(2) Scholarships from grants under suhsection (a) for any school year shall be awarded to students, particularly students from low-income families, on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,500 for any year, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) Grants under subsection (a) shall he made in accordance with regulations prescribed after consultation with the National Advisory Council on Medical, Optometric, and Dental Education.

"(e) Grants under suhsection (a) may be paid in advance or by way of reimhursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

(b) Section 724 of such Act (containing definitions) is amended by striking out "As used in this part" and inserting in lieu thereof "As used in this part and parts C, E, and F"; and section 740(a) of such Act is amended by striking out "(as defined in section 724)".

EXTENSION OF CONSTRUCTION PROGRAM FOR MEDICAL, DENTAL, AND OTHER HEALTH PROFESSION SCHOOLS

SEC. 3. (a) Effective with respect to appropriations for fiscal years heginning after June 30, 1966, section 720 of such Act is amended to read as follows:

"SEC. 720. There are authorized to be appropriated for the fiscal year ending June 30, 1967, and for each of the four succeeding fiscal years, such sums as may be necessary for—

"(1) grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, or professional public health personnel;

"(2) grants to assist in the construction of new teaching facilities for the training of dentists; and

"(3) grants to assist in the replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, professional public health personnel, or dentists.

Sums so appropriated shall remain available until expended."

(h) Subsection (a) of section 721 of such Act is amended to read as follows:

"(a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for grants under this part for any fiscal year must he filed."

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

SEC. 4. (a) Subsection (h)(4) of section 740 of such Act is amended by striking out "July 1, 1966" and inserting in lieu thereof "July 1, 1971".

(b) Snbsection (a) of section 741 of snch Act is amended hy striking out "may not exceed $2,000" and inserting in lieu thereof "may not exceed $2,500".

(c) Subsection (a) of section 742 of such Act is amended (1) by inserting "(other than section 744)" after "to carry out this part", and (2) by striking out that part of the first sentence that follows "June 30, 1966," and inserting in lieu thereof the following: "and such sums as may be necessary for the fiscal year ending June 30, 1967, and each of the four succeeding fiscal years. There are further authorized to be appropriated to the Secretary such sums for the fiscal year ending June 30, 1972, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan under this part for any academic year ending before July 1, 1971, to continue or complete their education."

(d) Section 743 of such Act is amended hy striking out "1969" wherever it appears therein and inserting in lieu thereof "1974."

(e) Section 744 of such Act is amended by adding at the end thereof the following new sentences: "There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this section, but not to exceed a total of $2,500,000. Loans made by the Surgeon General under this section shall mature within such period as may be determined by the Surgeon General to be appropriate in each case, but not exceeding fifteen years."

TECHNICAL AMENDMENTS

SEC. 5. (a) Clause (B) of section 721(b)(1) of such Act (relating to the accreditation of new schools of medicine, etc.) is amended by (1) striking out ", upon completion of such facility," and (2) inserting the following after "meet the accreditation standards of such bodies": "(i) prior to the beginning of the academic year following the normal graduation date of the first entering class in such school or (ii) if later, upon completion of the project for which assistance is reqnested and other projects (if any) under construction or planned and to be commenced within a reasonable time."

(b) Clause (1) of section 843(f) of such Act (relating to accreditation of new schools of nursing), is amended by striking out "new school" and the remainder of such clause and inserting in lieu thereof the following: "new school (which shall include a school that has not had a sufficient period of operation to be eligible for accrediation), (A) upon completion of snch project and other construction projects (if any) then under construction or planned and to be commenced within a reasnoahle time, or (B) if later, then prior to the beginning of the first academic year following the normal gradnation date of the first entering class in such school;".

[H.R. 8811, 89th Cong., 1st sess.]

A BILL To amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, optometry, and oestopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy stndents, and to extend expiring provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Amendments of 1965".

EDUCATIONAL IMPROVEMENT GRANTS AND SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, OPTOMETRY, AND OSTEOPATHY

SEC. 2. (a) Title VII of the Public Health Service Act is amended hy adding at the end thereof the following new parts:

"PART E—GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, OPTOMETRY, AND OSTEOPATHY

"AUTHORIZATION OF APPROPRIATONS

"SEC. 770. There are anthorized to be appropriated $20,000,000 for the fiscal year ending June 30, 1966, and such sums as may be necessary for each of the four snceeding fiscal years, for grants under this part to assist schools of

medicine, dentistry, optometry, and osteopathy to improve the quality of their educational programs.

"BASIC IMPROVEMENT GRANTS

"SEC. 771. (a) The Surgeon General may make basic improvement grants as follows:

"(1) For the fiscal year ending June 30, 1966, each school of medicine, dentistry, optometry, or osteopathy whose application for a basic improvement grant for such year has been approved by the Surgeon General shall be paid the sum of $12,500 plus the product obtained by multiplying $250 by the number of full-time students in such school.

"(2) For each fiscal year in the period beginning July 1, 1966, and ending June 30, 1970, each such school whose application has been approved for such a grant for such year shall be paid the sum of $25,000 plus the product obtained by multiplying $500 by the number of full-time students in such schools.

"(b) For purposes of this part and part F, regulations of the Surgeon General shall include provisions relating to determination of the number of students enrolled in a school, or in a particular year-class in a school, as the case may be, on the basis of estimates, or on the basis of the number of students enrolled in a school, or in a particular year-class in a school, in an earlier year, as the case may be, or on such basis as he deems appropriate for making such determination, and shall include methods of making such determinations when a school or a year-class was not in existence in an earlier year at a school.

"(c) For purposes of this part and part F, the term 'full-time students' (whether such term is used by itself or in connection with a particular year-class) means students pursuing a full-time course of study leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, doctor of optometry or an equivalent degree, or doctor of osteopathy.

"SPECIAL IMPROVEMENT GRANTS

"SEC. 772. From the sums appropriated under section 770 for any fiscal year and not required for making grants under section 771, the Surgeon General may make an additional grant for such year to any school of medicine, dentistry, optometry, or osteopathy which has an approved application therefor and for which an application has been approved under section 771 if he determines that the applicant needs additional financial assistance in order to strengthen its curriculum or to improve the quality of its education. No grant to any school under this section for any fiscal year may exceed $100,000 for the fiscal year ending June 30, 1966; $200,000 for the fiscal year ending June 30, 1967; $300,000 for the fiscal year ending June 30, 1968; or $400,000 for the fiscal year ending June 30, 1969, or the succeeding fiscal year.

"APPLICATIONS FOR GRANTS

"SEC. 773. (a) The Surgeon General may from time to time set dates (not earlier than in the fiscal year preceding the year for which a grant is sought) by which applications for basic or special grants under section 771 or 772 for any fiscal year must be filed.

"(b) To be eligible for a grant under this part, the applicant must (1) be a public or other nonprofit school of medicine, optometry, dentistry, or osteopathy, and (2) be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that the requirement of this clause (2) shall be deemed to be satisfied if, (A) in the case of a school which by reason of no, or an insufficient period of operation is not, at the time of application for a grant under this part, eligible for such accreditation, the Commissioner finds after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will meet the accreditation standards of such body or bodies prior to the beginning of the academic year following the normal graduation date of students who are in their first year of instruction at such school during the fiscal year in which the Surgeon General makes a final determination as to approval of the application, or (B) in the case of any other school, the Commissioner finds after such consultation and after consultation with the Surgeon General that there is reasonable ground to expect that, with the aid of a grant or grants under this part, having regard for the purposes of the grant sought, such school will meet such accreditation standards within a reasonable time.

"(c) The Surgeon General shall not approve or disapprove any application for a grant under this part except after consultation with the National Advisory Council on Medical, Optometric, and Dental Education (established by section 774).

"(d) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that the application meets the eligibility conditions set forth in subsection (h) of this section, sets forth plans for using the grants which the Surgeon General finds give reasonable promise of strengthening and improving the school's faculty and curriculum, contains such additional information as he may require to make the determinations required of him under this part and such assurances as he may find necessary to carry out the purposes of this part, and provide for such fiscal control and accounting procedures and reports, and access to the records of grants recipients, as he may require to assure proper disbursement of and accounting for Federal funds paid to the applicant under this part.

"(e) In considering applications for grants under section 772, the Surgeon General shall take into consideration the relative financial need of the applicant for such a grant, the relative effectiveness of the applicant's plan in strengthening and improving its faculty and curriculum and in contributing to an equitable geographical distribution of opportunities for high-quality training of physicians, dentists, optometrists, and osteopaths; and such other factors as he, after consultation with the National Advisory Council on Medical, Optometric, and Dental Education, may deem relevant.

"NATIONAL ADVISORY COUNCIL ON MEDICAL, OPTOMETRIC, AND DENTAL EDUCATION

"SEC. 774. (a) There is hereby established in the Public Health Service a National Advisory Council on Medical, Optometric, and Dental Education consisting of the Surgeon General, who shall be Chairman, and twelve members appointed without regard to the civil service laws by the Surgeon General with the approval of the Secretary of Health, Education, and Welfare, and such appointments may be made for specified staggered terms. The appointed members of the Council shall be selected from among leading authorities in the fields of medical, optometric, and dental education, respectively, except that not less than three of such members shall be selected from the general public.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part and part F, and in the review of applications under this part.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part or part F, for such periods, in addition to conference periods, as he may determine.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at rates to be fixed by the Secretary but not exceeding $100 per day, including travel time; and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"PART F—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OPTOMETRY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 780. (a) The Surgeon General shall make grants as provided in this part to each public or other nonprofit school of medicine, osteopathy, optometry, or dentistry, which is accredited as provided in section 721(b)(1)(B) or section 773(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under subsection (a) to each such school shall be equal to $2,000 multiplied, (1) for the fiscal year ending June 30, 1966, by one-tenth of the number of full-time first-year students of such school; (2) for the fiscal year ending June 30, 1967, by one-tenth of the number of full-time first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1968, by one-tenth of the number of full-time first-year students, second-

year students, and third-year students of such school; and (4) for the fiscal year ending June 30, 1969, and for the succeeding fiscal year, by one-tenth of the number of full-time students of such school. For the fiscal year ending June 30, 1971, and for each of the two succeeding fiscal years, the grant under subsection (a) shall be such amount as may be necessary to enable such school to continue making payments under scholarship awards to students who initially received such awards out of grants made to the school for fiscal years ending prior to July 1, 1970.

"(c) (1) Scholarships may be awarded by schools from grants under subsection (a)—

"(A) only to individuals who have been accepted by them for enrollment as full-time first-year students, in the case of awards from such grants for the fiscal year ending June 30, 1966;

"(B) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year students, in the case of awards from such grants for the fiscal year ending June 30, 1967;

"(C) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time second-year or third-year students, in the case of awards from such grants for the fiscal year ending June 30, 1968;

"(D) only to individuals who have been so accepted, and individuals enrolled and in good standing as full-time students, in the case of awards from such grants for the fiscal year ending June 30, 1969, or for the succeeding fiscal year; and

"(E) only to individuals enrolled and in good standing as full-time students who initially received scholarship awards out of such grants for a fiscal year ending prior to July 1, 1970, in the case of awards from such grants for the fiscal year ending June 30, 1971, or the two succeeding fiscal years.

"(2) Scholarships from grants under subsection (a) for any school year shall be awarded to students, particularly students from low-income families, on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,500 for any year, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) Grants under subsection (a) shall be made in accordance with regulations prescribed after consultation with the National Advisory Council on Medical, Optometric, and Dental Education.

"(e) Grants under subsection (a) may be paid in advance or by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

(b) Section 724 of such Act (containing definitions) is amended by striking out "As used in this part" and inserting in lieu thereof "As used in this part and parts C, E, and F"; and section 740(a) of such Act is amended by striking out "(as defined in section 724".

EXTENSION OF CONSTRUCTION PROGRAM FOR MEDICAL, DENTAL, AND OTHER HEALTH PROFESSION SCHOOLS

SEC. 3. (a) Effective with respect to appropriations for fiscal years beginning after June 30, 1966, section 720 of such Act is amended to read as follows:

"SEC. 720. There are authorized to be appropriated for the fiscal year ending June 30, 1967, and for each of the four succeeding fiscal years, such sums as may be necessary for—

"(1) grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, or professional public health personnel;

"(2) grants to assist in the construction of new teaching facilities for the training of dentists; and

"(3) grants to assist in the replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, professional public health personnel, or dentists.

Sums so appropriated shall remain available until expended."

(b) Subsection (a) of section 721 of such Act is amended to read as follows:

"(a) The Surgeon General may from time to time set dates (not earlier than

in the fiscal year preceding the year for which a grant is sought) by which applications for grants under this part for any fiscal year must be filed."

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

SEC. 4. (a) Subsection (b)(4) of section 740 of such Act is amended by striking out "July 1, 1966" and inserting in lieu thereof "July 1, 1971".

(b) Subsection (a) of section 741 of such Act is amended by striking out "may not exceed $2,000" and inserting in lieu thereof "may not exceed $2,500".

(c) Subsection (a) of section 742 of such Act is amended (1) by inserting "(other than section 744)" after "to carry out this part", and (2) by striking out that part of the first sentence that follows "June 30, 1966," and inserting in lieu thereof the following: "and such sums as may be necessary for the fiscal year ending June 30, 1967, and each of the four succeeding fiscal years. There are further authorized to be appropriated to the Secretary such sums for the fiscal year ending June 30, 1972, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan under this part for any academic year ending before July 1, 1971, to continue or complete their education."

(d) Section 743 of such Act is amended by striking out "1969" wherever it appears therein and inserting in lieu thereof "1974".

(e) Section 744 of such Act is amended by adding at the end thereof the following new sentences: "There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this section, but not to exceed a total of $2,500,000. Loans made by the Surgeon General under this section shall mature within such period as may be determined by the Surgeon General to be appropriate in each case, but not exceeding fifteen years."

TECHNICAL AMENDMENTS

SEC. 5. (a) Clause (B) of section 721(b)(1) of such Act (relating to the accreditation of new schools of medicine, etc.) is amended by (1) striking out ", upon completion of such facility," and (2) inserting the following after "meet the accreditation standards of such bodies": "(i) prior to the beginning of the academic year following the normal graduation date of the first entering class in such school or (ii) if later, upon completion of the project for which assistance is requested and other projects (if any) under construction or planned and to be commenced within a reasonable time."

(b) Clause (1) of section 843(f) of such Act (relating to accreditation of new schools of nursing), is amended by striking out "new school" and the remainder of such clause and inserting in lieu thereof the following: "new school (which shall include a school that has not had a sufficient period of operation to be eligible for accreditation), (A) upon completion of such project and other construction projects (if any) then under construction or planned and to be commenced within a reasonable time, or (B) if later, then prior to the beginning of the first academic year following the normal graduation date of the first entering class in such school;".

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS' AFFAIRS,
Washington, D.C., June 18, 1965.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: The following comments are submitted in response to your request for a report by the Veterans' Administration on H.R. 2366, 89th Congress.

The purpose of the bill is to provide for a program of scholarships for students of medicine, osteopathy, and dentistry.

This program would be administered by the Department of Health, Education, and Welfare, and would appear to impose no additional administrative responsibilities on the Veterans' Administration.

The Veterans' Administration has an extensive hospital and medical program to provide care for sick and disabled veterans. In carrying out this program we employ a large number of professional medical personnel. Therefore any reasonable steps which would enhance the opportunities of the better students to

enter medical and dental schools, regardless of income, and attract more potentially qualified persons into the health professions would be of interest to us.

In his message to Congress on January 7, 1965, on advancing the Nation's health, the President noted the rising cost of medical education and recommended legislation to authorize scholarships for medical and dental students who otherwise would not be able to enter or complete such training. We are advised that H.R. 3141 embodies this and other related recommendations of the President.

We favor the principle of financial assistance to students in this field who need such assistance. Because of some differences in approach we recommend that, instead of H.R. 2366, the administration bill (H.R. 3141) be favorably considered by your committee.

We are advised by the Bureau of the Budget that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely,

W. J. DRIVER, *Administrator.*

U.S. DEPARTMENT OF LABOR,
OFFICE OF THE SECRETARY,
Washington, D.C., June 14, 1965.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your request for the views of the Department of Labor on H.R. 3141, the Health Professions Education Assistance Act amendments of 1965.

This bill is intended to carry out recommendations of President Johnson in his January 7, 1965 health message to Congress. The Department of Labor supports enactment of H.R. 3141. The existing legislation which this bill would amend contains adequate labor standards covering federally financed construction. No additional standards would appear to be necessary.

The Bureau of the Budget advises that there is not objection to the submission of this report from the standpoint of the administration's program.

Sincerely,

W. WILLARD WIRTZ,
Secretary of Labor.

U.S. CIVIL SERVICE COMMISSION,
Washington, D.C., May 21, 1965.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in further reply to your request of February 15, 1965, for the views of the Civil Service Commission on H.R. 3141, a bill to amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, and osteopathy, to authorize grants under that act to such schools for the awarding of scholarships to needy students, and to extend expiring provisions of that act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes.

The Commission strongly supports the overall purposes and objectives of this bill.

Our comments on the bill are limited to the personnel matters dealt with in the new sections 774(a) and 774(d) of the Public Health Service Act. We have no objection to the manner in which the members of the National Advisory Council on Medical and Dental Education are appointed and compensated.

The Bureau of the Budget advises that from the standpoint of the administration's program there is no objection to the submission of this report.

By direction of the Commission,

Sincerely yours,

JOHN W. MACY, Jr., *Chairman.*

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., June 21, 1965.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your requests for the views of the Bureau of the Budget on H.R. 3141 and H.R. 7385, bills to increase the opportunities for training physicians, dentists, osteopaths, and other health personnel and improve the quality of such education.

The administration proposal, H.R. 3141, incorporates those elements mentioned by the President in his health message to the Congress as being required to meet the country's future need for trained health personnel. These included continuation of the existing student loan and educational facility construction support program, initiation of support grants to improve teaching capabilities, and a new program of scholarships for full-time students of medicine, dentistry, and osteopathy, particularly for those from low-income families.

Not only must the supply of physicians and dentists be increased in order to maintain the present level of care but additional numbers must be educated to provide adequately for the increasing numbers of our population who are in their sixties and older.

H.R. 7385 would broaden the President's proposed program by authorizing educational improvement grants and scholarships in the field of optometry. We regard this as a lesser need than that occasioned by a shortage of doctors or dentists.

Accordingly, we favor the enactment of H.R. 3141 as in accord with the program of the President, and do not favor enactment of H.R. 7385.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

The CHAIRMAN. We have with us today our colleague, Mr. Bennett of Florida. Mr. Bennett, we appreciate your interest in this program. We are glad to have you as the leadoff witness, and we shall be glad to hear you at this time.

STATEMENT OF HON. CHARLES E. BENNETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. BENNETT. Thank you very much, Mr. Chairman. At the outset I would like to say I have introduced H.R. 8751, which is identical to the administration bill, adding only optometry, to provide scholarships also for students of optometry.

I deeply appreciate the opportunity to appear before the committee in support of my bills, H.R. 2366 and H.R. 8751, each to provide for Federal scholarships for students of medicine, osteopathy, and dentistry. I am also appearing before the committee in support of other legislation in this field, including H.R. 3141, introduced by the distinguished chairman of the Committee on Interstate and Foreign Commerce.

I have introduced the similar bill, H.R. 8751, which would include not only scholarships for students of medicine, osteopathy, and dentistry, but also students of optometry.

It was my privilege in the last session of Congress to support and take an active part in the passage of the Health Professions Educational Assistance Act of 1963, of which I was a cointroducer.

I have long been interested in the long-range planning to produce the needed doctors to serve our Nation's growing population, including the construction of medical schools and scholarships to needy students in the field of medicine.

As a member of the House Armed Services Committee I have witnessed how this national problem of inadequate medical schools and not having enough doctors affects our national defense mission. It was with this in mind that I introduced legislation in this field back in the 84th Congress, and I have continued to have a very great interest in it.

In this session of Congress I have reintroduced measures to establish an Armed Services Medical School—H.R. 272—and to provide for scholarships to medical and dental students who would serve in the armed services for a period of time after they completed their education—H.R. 2365. These measures would help to eliminate the "doctor's draft" and are now pending in the Armed Services Committee.

The facts and figures about the critical demand for doctors and teaching facilities have been well publicized. In October 1959, the report of the Surgeon General's Consultant Group on Medical Education pointed out that the expected 1975 population of 235 million will require a total of 330,000 doctors of medicine and osteopathy. This would necessitate the annual graduation of 11,000 students, an increase of approximately 3,600 over the 1959 graduates.

In the President's message to Congress on health earlier this year he said that we would need 346,000 physicians in 10 years, almost 60,000 more than we now have.

The Association of American Medical Colleges reported in 1963 that 3,500 additional medical doctors must be graduated each year from medical schools by 1975. This is supporting evidence to the need for more doctors.

A survey in 1963–64 showed the expenses of single medical students were about $2,700 a year, and of married students who had more than one child, $5,200. Fifty percent of the income of the single student comes from gifts and loans from his family. Earnings account for 30 percent and only 8 percent comes from nonrepayable grants. Among married students with no children, 57 percent of the income derives from the earnings of the spouse, and only 16 percent from the family.

One-half of last June's medical school graduates came from families with incomes exceeding $10,000 a year.

It is essential that medical schools accept talented young people from every level of income status. This is not the case now. The high cost of a medical education prevents many qualified students from pursuing medical careers.

The Federal Government has an obligation to the nation's health and well-being, to help where it can properly help in filling this medical gap. The Government has done much in this field, and now 51 percent of total medical school expenditures are provided by the Government.

I have contacted the medical associations directly involved in my legislation and have favorable replies from some of them.

Bernard J. Conway, secretary, Council on Legislation, American Dental Association, wrote me:

> The American Dental Association has, in the past, favored Federal financial support for the operational costs of dental schools and scholarships for dental students. To the extent that H.R. 2366 would supply federal funds under appropriate safeguards, the association could approve your proposal in principle.

Dr. Campbell A. Ward, president, American Osteopathic Association, wrote:

> With regard to the bill, H.R. 2366, which amends the Health Professions Educational Assistance Act of 1963, I recall that our osteopathic witness before the House Commerce Committee in testimony * * * advocated Federal scholarship aid as necessary to increase the pool of available superior students, and the need continues. I am sure the program advocated in your bill would be of great assistance in the improvement and extension of physician training in our institutions.

The American Optometric Association is also behind this legislation.

The urgent need for this legislation is well documented. I congratulate the committee on taking a leadership role in this problem of providing adequate medical facilities and doctors to meet the demands of the future.

Thank you very much for allowing me to testify in support of this legislation, which the country needs now.

The CHAIRMAN. Mr. Bennett, thank you very much.

H.R. 8751 which you introduced is identical to H.R. 3141?

Mr. BENNETT. With the sole exception that it adds optometry.

That is the only thing it changes. It suggests the inclusion of optometry as well.

The CHAIRMAN. Very well. Thank you very much. We appreciate having your statement.

Mr. BENNETT. Thank you, sir.

The CHAIRMAN. The next witness is our colleague from Rhode Island, the Honorable John E. Fogarty. Mr. Fogarty, we are aware of your long interest in health legislation and we are glad to have your testimony at this time.

STATEMENT OF HON. JOHN E. FOGARTY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF RHODE ISLAND

Mr. FOGARTY. Mr. Chairman, you and I have worked together in the House for almost a quarter of a century to advance the health of the American people. I know that for both of us one of the highlights of those years was the passage in 1963 of the Health Professions Educational Assistance Act—the bill we are extending and modifying now, in 1965.

I recall your clear defense of the 1963 measure as a health—not an education—bill. You pointed out at that time that it belonged to a series of congressional acts dating back to the 79th Congress, when the Congress began to take a very active interest in programs aimed at providing improved health services for the American people, both quantitatively and qualitatively. And I recall—and can only echo today—your remarks about the fact that hospitals and other health facilities alone cannot cure people. And you observed at that time that we had not enough doctors, dentists, and other health personnel because of one bottleneck: the inadequacy of present facilities in which our doctors and dentists are trained.

Mr. Chairman, you and I have long memories in these matters. We know that the bill we are considering today modifies one of the most vital measures Congress ever enacted in the health field. We know what a long series of legislative proposals the various Congresses con-

sidered, and failed to pass, before this act finally passed the 88th Congress and was signed into law in September 1963.

As far back as the 85th Congress I had introduced a measure to provide grants for construction of research facilities and teaching facilities which was a direct ancestor of the Health Professions Educational Assistance Act. By early in 1959, expert witnesses before my committee had made me aware of the acute need for essential health personnel—a need that the masterful document "Physicians for a Growing America," first outlined in its overall dimensions later that year.

Since that time a series of distinguished committees and Commissions has reaffirmed and refined the facts. Most recently it was the President's Commission on Heart Disease, Cancer, and Stroke. Surely there can no longer be any doubt in any quarter that we will need more physicians and dentists—many more physicians and dentists—to meet this Nation's health needs. We know now that the number of new physicians graduated each year must increase at least 50 percent, and the output of new dentists must increase 100 percent, by 1975. This is the magnitude of the problem before us, and surely no one can go on denying it, today.

It is not my intention to belabor the obvious. But it is my intention to put this matter in proper perspective for those who may not share our views. The Health Professions Educational Assistance Act of 1963 was a hard-won landmark, and one which should have been reached half a dozen years earlier. It is still incredible to me that successive Congresses delayed so long in the face of so urgent a problem.

I want, at this time, to turn directly to the bill we are considering today. First of all, it will expand the Health Professions Educational Assistance Act by providing grants to improve the quality of schools of medicine, dentistry, and osteopathy. This assistance will enable our schools to strengthen their curriculums, and is a logical extension of the construction provisions already embodied in the act.

Section 720 of the Health Professions Educational Assistance Act must be extended. I am very proud of what Brown University in my home State of Rhode Island has been able to do with the assistance of Federal funds provided by this act. As you may know, Rhode Island is one of several States that do not have a medical school. When it became clear to Brown that existing medical schools could not produce enough physicians, Brown—as the State's leading institution of higher education—initiated an entirely new program in medical education based on a 6-year curriculum. Since September 1963 Brown has been proceeding along these lines which, by 1970, will result in an investment of several millions of dollars, a part of which will be Federal funds. To date the Federal funds for construction and the student loan provisions of the act have greatly enhanced the growth of Brown—and of a number of other universities across this Nation—and it is imperative that this pattern of growth continue.

Mr. Chairman, I am glad that we are going to liberalize the student loan provisions of the Health Professions Educational Assistance Act. I am all for this. I recall the words of our esteemed colleague, Senator Hill, when he was shepherding that act through the Senate in 1963. He noted that much had been said about the way this loan proviso was

patterned after the National Defense Education Act. "I had the honor of being one of the authors of that bill," he said and he added:

> The successes under the program have been very satisfying and rewarding. But the National Defense Education Act loans do not fit the needs of students in dentistry or medicine.

Senator Hill was pointing out that the aim was to provide a program complementary to the National Defense Education Act. Nevertheless, we now have experience to prove that the loan provisions were still not adequate to meet the needs of the medical and dental students—nor will these needs be met solely by liberalization of loans.

It is with a sense of personal satisfaction that I endorse the proposal we have here today for a program of scholarships for needy students. You will recall, Mr. Chairman, that when I testified before this committee in August of 1963, in behalf of H.R. 12, I expressed my deep disappointment over the House action striking the scholarship provisions from that bill. In several Congresses before the 88th I had introduced scholarship bills in the House—only to see them die there. It must not happen again.

It is essential that talented young people from every level of our society be encouraged to enter the medical professions. Yet the high cost of health education is still preventing many qualified students from becoming doctors or dentists.

To mention only one instance, a survey in 1963–64 showed that the expenses for single medical students were about $2,700 a year, and for married students with more than one child, $5,200. One-half of last June's medical school graduates came from families with incomes exceeding $10,000 a year. The scholarship provisions of this measure we are considering and the liberalization of the loan program to provide—like the scholarships—up to $2,500 a year, will make for greater equality of opportunity in one vital area of our society.

In this time of social change in the health fields it is noteworthy when one comes across a signpost to the future. When Abraham Flexner completed his thorough study of all the medical schools in the United States, his report became such a signpost. I have just been reading another report, issued by the Association of American Medical Colleges, which impresses me as another Flexner report. It is called "Planning for Medical Progress Through Education," and it was prepared by Dr. Lowell T. Coggeshall.

This report suggests courses of action that must be taken if medical education is to meet the challenge of providing for the health of all of our people. It does not deal in unsupported generalities. I would like to leave with you a few words from this remarkable report:

> A continuing trend is the growing need for physicians. In centuries past, the physician's concern was with life and death. Now, with increased capabilities, he is concerned more and more with care in illness and preventive care. The consequence of this development * * * is a growing need for physicians * * *.
>
> Clearly, past trends and implementation of the prevailing philosophy are expanding the role of Government in the health care field as well as in the sponsorship of research and education. Expansion of the Government's role is the logical consequence of a generally enlarged sense of public responsibility for national and individual health.

I am sure, Mr. Chairman, that in the new climate of concern for social welfare in which we find ourselves today, the measure we are considering here will be enacted into law. When that happens, it will

indeed reflect an enlarged sense of public responsibility on the part of the 89th Congress.

The CHAIRMAN. Are there any questions? If not, we appreciate your appearance, Mr. Fogarty.

Mr. FOGARTY. Thank you, Mr. Chairman.

The CHAIRMAN. The next witness is our colleague from Florida, the Honorable Claude Pepper. Mr. Pepper, we welcome you to the committee.

STATEMENT OF HON. CLAUDE PEPPER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. PEPPER. Mr. Chairman, I appreciate very much this opportunity to testify today in support of my bill, H.R. 7806, which is a companion to your own H.R. 3141, a bill to amend the Health Professions Educational Assistance Act of 1963 to provide for grants to schools of medicine, dentistry, and osteopathy to expand and improve their educational programs and to provide for scholarships to students in these professions.

I hope you will permit me at the outset, Mr. Chairman, to express my sincere admiration of the fine work you and the other members of this distinguished committee have done with regard to the health of our Nation. Nearly all of our significant health legislation has been initiated or molded by this committee. This legislation has spanned a wide range of needs—from hospital construction to food and drug standards, from vaccination assistance to services and facilities for the mentally ill, and from medical research to professional training. A prominent 19th century American clergyman—(William Rounseville Alger)—once observed—

> True statesmanship is the art of changing a nation from what it is into what it ought to be.

Mr. Chairman, you and your colleagues have indeed been exercising the art of true statesmanship, for the work of this committee has been a vital factor in improving U.S. standards of health care so that our national life has come steadily closer to what it ought to be.

The bill before the committee today would, I am sure, be another important milestone in the health progress of our country. The Health Professions Educational Assistance Act adopted in 1963 has already proved very popular with both the professional schools and their students. There has been a tremendous demand for construction funds and a nearly 100-percent school participation rate in the student loan program. Unfortunately, however, there simply is not enough money to go around. And what is even more important is the fact that there is no provision for operating funds which is the most urgent need of many medical schools. Moreover, although the administration had included provisions for medical and dental scholarships as well as loans in the proposed legislation it sent to Congress in 1962, the scholarship program was deleted from the final bill.

In my judgment Congress is in no way at fault for not including these provisions in the original Health Professions Act. Rather, it was only prudent to await the first results of the construction grants and student loan programs before embarking upon an even more am-

bitious and costly program. I think experience has shown, however, and I hope the testimony of the next few days will bear me out, that the Nation's critical shortage of doctors and dentists and the financial burdens of many of the professional schools make it imperative for the Federal Government to provide increased support for education in the health professions.

The American Medical Association in 1963 published a very informative report entitled "Money and Medical Schools." The AMA Council on Medical Education and Hospitals, which made the study, pointed out that although research funds are always readily available, grants to support and improve general undergraduate medical education are very difficult to procure. The committee went on to explain that medical school expenditures have grown tremendously in recent years—from $32 to $436 million between 1940 and 1960—and that the principal factor in this increase has been the need for much larger faculties. Two decades ago, for example, two or three full-time teachers of microbiology could easily teach a class of medical students. Today, a similar department for the same number of medical students is not considered adequately staffed without members competent in each of several areas such as bacteriology, mycology, virology, immunology, and parasitology. Each of these fields is so complex and is developing so rapidly that a person finds it difficult to keep up with more than one or two related fields.

The AMA survey revealed that there are wide differences between the "have" and "have-not" medical schools in terms of staff. The 10 schools with the highest total expenditures for operations were compared with the 10 schools with the lowest expenditures. Although the average student enrollment of the top 10 was only 1½ times that of the bottom group, the average total expenditure of the "haves" was six times that of the "have-nots," and the average number of full-time faculty members was nearly five times greater. Moreover, the top group averages 6 times more Federal training grants and 12 times more Federal research grants than the bottom group, a situation which tends to perpetuate the disparities among schools since outstanding teachers and scientists are naturally drawn to the wealthier schools and they, in turn, make it possible for the school to receive further grants and contracts.

The committee noted that while it is inevitable that there should be a broad range of expenditures among the medical schools, it believed that the present gap between the strong and weak schools was too great to reflect only healthy variations. The committee expressed fear that unless something is done to assist the weaker schools to meet their operational costs and to provide more adequate staffs, some of them may be forced to close. Certainly, we would agree with the comimttee that in view of our critical need for doctors and for the medical schools which produce them, it would be extremely unfortunate if we were to lose even one of our existing schools.

Mr. Chairman, I know the members of this committee are familiar with the recent report of the President's Commission on Heart Disease, Cancer, and Stroke. I would like to point out for the record, however, that the Commission's Subcommittee on Manpower also found that shortages of operational funds and shortages of faculty members are seriously impairing the functioning of many of our medical schools.

Some of the newer schools are particularly hard pressed, but the committee found that a large number of schools need long-term financial assistance in order to enlarge and stabilize their full-time faculties. The subcommittee felt, moreover, that even the more prestigious and well-supported institutions which have excellent faculties and facilities would profit from a stimulus to relate themselves more widely to the total health problems of their communities and to develop new and progressive educational programs.

In support of its proposals for further Federal aid to medical education, the Subcommittee on Manpower stated that physicians are a national resource in that the welfare of the Nation depends upon their services. Furthermore, the schools which train them are also national resources since their graduates migrate freely throughout the country, their demonstration and research projects modify medicine widely, and knowledge gained in them is available everywhere. In other words, the benefits of better medicine observe no boundaries. Therefore, the support of medical education should be considered a national necessity.

The Health Professions Educational Assistance Act is concrete evidence that Members of Congress also ascribe to this philosophy. All of us are by now familiar with and very concerned about the critical shortage of doctors, dentists, and other members of the health professions in this country. We also know that the situation will become even worse in the next few decades unless we take immediate action to encourage professional education. Not only is our population growing, but other developments such as increased prosperity and urbanization as well as more widespread participation in health insurance programs are encouraging citizens to seek more and better health services than in the past. Furthermore, new medical knowledge will require additional manpower. First, complex techniques and equipment require more manpower. Surgery today often involves teams of 12 to 15 highly trained specialists instead of 1 or 2 doctors and several nurses. Then, also, more physicians will be needed if we are to extend the benefits of modern medicine to everyone. Finally, personnel will be needed to rehabilitate stroke and other patients saved by new medical techniques.

Mr. Chairman, it is a national tragedy that we already have the knowledge and capability but not the professional manpower to save many of our citizens who now face crippling illness and premature death. I am thinking of the thousands of children whose undetected and untreated streptococcal infections lead to valvular heart damage and the thousands of women who die every year from cancer of the cervix simply because there aren't enough technicians and supervising pathologists to screen the simple smear tests. This is not only a national tragedy but a national disgrace as well. Surely we, the richest nation in the world, can afford the price of a program to support medical education in order that we shall have sufficient doctors to meet the needs of our people. I will not go into the economic loss to the Nation because of illness and premature death since the President's Commission did so in great detail. Nor will I try to estimate the needless suffering and grief which result from inadequate medical services, for they cannot be measured. I will only say that we must take further action to remedy this situation, and we must do so immediately.

Mr. Chairman, we know from the Bayne report, the Jones report, and most recently from the President's Commission's report that we must substantially increase the number of medical graduates each year if we are even to maintain our current ratio of physicians to the general population. We also know that in order to do that we must establish a number of new medical schools. Therefore, it is essential that we continue and expand the facilities construction program under the Health Professions Educational Assistance Act. As I have attempted to show today, however, classrooms alone are not enough. Operating funds, particularly for staff salaries, are vital if the schools are to survive. We must follow through with this assistance if we are to realize the full value of the investment we are already making in medical school facilities.

While I have spoken at some length about the urgent need for operational grants to medical schools, I am equally concerned about the need for scholarships for medical students from low-income families. It seems very unfortunate to me such a disproportionate percentage of our medical students should come from high-income families and that very few should come from poor families. Certainly among the poorer families there are many bright and talented students who would make outstanding doctors if given the opportunity. Faced as we are with a serious shortage of physicians, we cannot afford to waste any of our resources or deny a professional education to any qualified and ambitious student. It is doubly ironic, it seems to me, that we should take in more than 1,600 foreign doctors a year to the great detriment of their native countries because we need doctors so badly ourselves and simultaneously refuse to lend a helping hand to some of our own students and thereby enable them to move up the social and financial ladder while at the same time providing an invaluable service to the Nation.

Mr. Chairman, as you know, I have long been deeply interested and involved in health legislation. I think I can safely say that the Health Professions Educational Assistance Act of 1963 was one of the most significant pieces of health legislation ever enacted by Congress. Now, however, it is apparent that some amendments are in order if we hope to achieve our medical manpower goal. I hope this committee will again exhibit its statesmanship in the field of health by giving its complete support to these proposed amendments. I call that statesmanship for I am convinced that this legislation, like the original act, will help change our Nation "from what it is to what it ought to be."

The CHAIRMAN. Are there any questions? If not, we thank you for your testimony, Mr. Pepper.

Mr. PEPPER. Thank you for the opportunity, Mr. Chairman.

The CHAIRMAN. The next witness is our colleague from New Jersey, the Honorable Edward J. Patten. Mr. Patten, we will be glad to hear you at this time.

STATEMENT OF HON. EDWARD J. PATTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PATTEN. Mr. Chairman and members of the House Interstate and Foreign Commerce Committee, I want to express my enthusiastic support for this proposed legislation, H.R. 3141.

In addition to extending and improving the present authorizations for student loans and construction grants, this bill would also authorize two important new programs.

Grants could be made to schools of medicine and dentistry from which scholarships could be awarded to capable students from low-income families. These scholarships are needed to enable medical and dental schools to compete for outstanding students and to whom such nonrepayable support is available in other fields of scientific study.

Also, grant funds would be made available to increase the teaching budgets of these schools. The training of physicians and dentists is expensive. Yet funds for teaching are limited and are distributed unevenly among the schools.

One school has more than 10 times as much money for its operating (teaching) budget as does another. Dr. Thomas M. Durant, chairman, Department of Medicine, Temple University, was quoted in a recent issue of Medical World News (Apr. 2, 1965, p. 45) as follows:

*** * * the need for great teachers is as imperative as that for great researchers * * *.**

Now is the time for the Government to recognize that schools of medicine and dentistry need assistance in providing improved instruction—as well as in conducting more research.

This legislation would be important to the people of New Jersey, which has over 6 million people and presently has only 1 medical school to serve its needs. This formerly church-supported school has been plagued with serious fiscal problems for some time and is now taken over by the State of New Jersey.

Also, with the assistance of Federal grants, a medical school at Rutgers, the State university, is now underway.

The provisions of this bill would provide urgently needed aid to these two institutions. It would enable them to provide improved teaching programs and also help students from low-income families to attend these schools through scholarships. This would help alleviate the growing shortage of physicians throughout the Nation.

Mr. Chairman and members, the need for this legislation is great. I hope that this committee will favorably report it and that it will be promptly enacted.

The CHAIRMAN. We thank you for your appearance and testimony, Mr. Patten.

Mr. PATTEN. Thank you, Mr. Chairman.

The CHAIRMAN. For the extension of their proposed highly important, and what appears now to be successful, program, we are glad to have the Honorable Edward W. Dempsey, Special Assistant to the Secretary, Health and Medical Affairs, of the U.S. Department of Health, Education, and Welfare.

Dr. Dempsey, we will be glad to have your presentation at this time.

You have a number of your associates with you?

Dr. DEMPSEY. Yes, Mr. Chairman.

The CHAIRMAN. We are always glad to extend a cordial welcome to you, including our friend, Dr. Terry, but I think probably it would be advisable to identify each for the record, in order that the record can reflect their presence, Doctor.

STATEMENT OF EDWARD W. DEMPSEY, SPECIAL ASSISTANT TO THE SECRETARY (HEALTH AND MEDICAL AFFAIRS), DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE; ACCOMPANIED BY DR. DONALD J. GALAGAN, CHIEF, DIVISION OF DENTAL PUBLIC HEALTH AND RESOURCES OF PUBLIC HEALTH SERVICE; DR. LUTHER L. TERRY, SURGEON GENERAL OF PUBLIC HEALTH SERVICE; DR. HARALD M. GRANING, CHIEF, DIVISION OF HOSPITAL AND MEDICAL FACILITIES; AND DR. JOHN W. CASHMAN, DEPUTY CHIEF, DIVISION OF COMMUNITY HEALTH SERVICES

Dr. DEMPSEY. Thank you very much, Mr. Chairman.

I am very pleased to introduce to you and to your committee Dr. Donald Galagan on my far left. He is the Chief of the Division of Dental Public Health and Resources of the Public Health Service.

You have already called attention to Dr. Luther Terry, Surgeon General of the Public Health Service.

On my right is Dr. Harald Graning, Chief of the Division of Hospital and Medical Facilities, Public Health Service.

And Dr. John Cashman, Deputy Chief, Division of Community Health Services, Public Health Service, is on my far right.

Mr. Chairman and members of the committee, I am pleased to appear before this committee in support of legislation designed to meet the Nation's critical need for more professional health personnel.

The health of the Nation can be no better than the knowledge and skills of the physicians, dentists, and others to whom we entrust it. It it is essential that we have a sufficient supply of such talent, drawn from the best and most gifted men and women in the land. But the harsh fact is that we are presently faced with a critical shortage in our supply of professional health personnel, and the situation will persist in the years ahead unless we take concerted action now.

The President's Commission on Heart Disease, Cancer, and Stroke recommended forthright and diversified Federal support of programs designed to increase the supply of physicians, dentists, and medical scientists.

Concern was expressed about both the need to increase the supply of physicians and the need to improve the quality of their training.

The Commission stated:

> The first hard fact to be faced is that there is not enough health manpower to meet the needs of the American people.

More recently, the great need for a concerted effort to increase the Nation's supply of health manpower was repeatedly emphasized in a report of a committee, chaired by Dr. Lowell T. Coggeshall, to the Executive Council of the Association of American Medical Colleges entitled, "Planning for Medical Progress Through Medical Education." This excellent program, I might say parenthetically, I think will be mentioned more in evidence to be presented by the American medical colleges; and I want to simply call attention to it at this point.

The Nation now lacks enough well-qualified physicians and dentists to give care to all the people who need it. When individuals who could be helped by skilled doctors suffer pain, endure handicaps, or die prematurely, the whole country's vitality is diminshed. Health

manpower alone will not assure the availability of the best health care for all Americans, regardless of age or geography or economic status. But if we are to progress toward the goals of adequate health care, we must have enough skilled personnel to man the facilities and provide the services required.

In 1963, under the distinguished leadership of the chairman of your committee, the Congress enacted the Health Professions Educational Assistance Act (Public Law 88–129) which authorized Federal matching grants for the construction of new and the expansion or rehabilitation of existing teaching facilities for the medical, dental, and other health professions, and also authorized a program of loans for students of medicine, dentistry, and osteopathy.

We cannot urge too strongly the continuation of these programs which are making essential contributions toward relieving the Nation's critical shortage of health manpower. But much more needs to be done before the health manpower problem can be taken off the Nation's critical list.

In his health message of January 7, 1965, President Johnson pointed out that the need for trained health personnel continues to outstrip the supply: high operating costs and shortages of operating funds are jeopardizing our health professions educational system; the high costs of medical school must not be permitted to deny access to the medical profession for able youths from low- and middle-income families; the number of physicians, dentists, and other health professionals must be sharply increased if we are to be able to meet future needs.

The President made a number of recommendations for legislation to help relieve the critical health manpower shortages.

H.R. 3141 embodies the administration's legislative proposal to carry out the President's recommendations.

In its major aspects the bill would amend the Public Health Service Act to—

1. Extend for 5 years the construction grant program for medical, dental, and other health profession schools authorized under the Health Professions Educational Assistance Act;
2. Extend for 5 years and improve the loan program under that same act for students of medicine, dentistry, osteopathy, and optometry;
3. Authorize a new 5-year program of basic and special improvement grants to improve the quality of schools of medicine, osteopathy, and dentistry;
4. Authorize a new 5-year program of scholarships for students of medicine, osteopathy, and dentistry;
5. Establish a National Advisory Council on Medical and Dental Education.

The challenges to which this legislation is addressed are widely recognized: The Nation's capacity to train professional health personnel must be further expanded. The supply of able and dedicated students must be increased. The quality of education in existing as well as new medical and dental schools must be assured.

The Nation's welfare demands adequate responses to these challenges.

Mr. Chairman, I should like to discuss the different provisions of the bill in some detail.

Construction grant program: The bill would extend for 5 years the existing program of grants for construction of new facilities or for the replacement or rehabilitation of existing facilities for the training of physicians, dentists, pharmacists, optometrists, podiatrists, or professional public health personnel. (Collegiate schools of nursing no longer would be covered, since, starting with fiscal year 1966, they will be eligible for construction aid under the Nurse Training Act of 1964.) Such sums as may be necessary for these purposes would be authorized to be appropriated for fiscal year 1967 and for each of the succeeding 4 years.

As you know, the Health Professions Educational Assistance Act, which authorized appropriations for construction grants for fiscal years 1964, 1965, and 1966, was not enacted until September of 1963. No moneys were appropriated for these purposes for fiscal year 1964, and the appropriation for fiscal year 1965 did not become law until September 1964. Therefore, we have had less than a year's experience under this program.

However, the initial reaction to this legislation has confirmed the wisdom of enacting it and has demonstrated the necessity of a more comprehensive program.

The availability of construction funds has encouraged schools to develop programs and proposals for the expansion of enrollment and replacement and modernization of existing obsolete facilities to prevent curtailment of enrollment. A total of almost $300 million has been requested in applications received from eligible schools. As of today, 44 of these applications have been approved and funded for construction projects which would entail first-year enrollment increases of 1,570, of which 540 are medical, 296 dental, 191 public health, 507 nursing, and 36 optometry.

An additional 120 letters indicate an intention to construct. Only 60 of these letters of intent include cost figures, but they alone forecast the need for an additional $305 million in Federal aid. Only $100 million is available for fiscal year 1965. The full authorizations which we requested for 1966 will provide but $75 million more. The current authorizations will, therefore, fall far short of meeting the demand.

To begin to meet the Nation's health needs, the number of new physicians graduated each year must increase by at least 50 percent by 1975, and the number of new dentists must increase at least 100 percent. This means, for example, that to obtain the goal for medical graduates there must be at least 12,700 first-year places by 1971 to train the 11,500 medical graduates of 1975. This is 3,500 more than the 9,200 first-year places in 1963–64.

The construction program must be markedly expanded and accelerated if we are to meet these goals. We therefore strongly urge that the program be extended for an additional 5-year period and that the authorization permit significantly increased appropriations to be requested in order to make a substantial alleviation of the growing shortage of professional health personnel and at the same time be realistically tailored to needs.

Extension of student loan program: The bill would extend for 5 year—through the fiscal year ending June 30, 1971—the student loan program for schools of medicine, dentistry, osteopathy, and optom-

etry authorized by the Health Professions Educational Assistance Act. Such sums as may be necessary to carry out the purposes of this program would be authorized to be appropriated.

The bill would also authorize the appropriation of $2.5 million for the loans (authorized by sec. 744 of the Public Health Service Act) to schools to help finance deposits required of institutions which establish a student loan fund. Loans made to institutions are to mature within the period determined by the Surgeon General, but not exceeding 15 years. Failure to provide a separate appropriation for institutional loans was, we understand, merely an oversight when the Health Professions Education Assistance Act was enacted.

The bill would increase the maximum amount which may be borrowed by a student for any academic year from $2,000 to $2,500. This increase in the maximum loan amount recognizes the increasing costs of medical and dental education and makes the program comparable to the annual maximum loan amount now available under the National Defense Education Act for graduate and professional students.

The loan program is in its first year of operation. Of the 152 schools of medicine, dentistry, osteopathy, and optometry which are eligible, 147, or 97 percent, have established health professions student loan funds to assist students to pursue their professional education. The entire sum authorized and appropriated is now in use. In 1965 this amounts to $10.2 million.

As with the construction program, need for funds has far exceeded the amounts authorized and appropriated. The degree of response to this program by schools and students demonstrated the great need for it. Despite the need for scholarships to supplement this program, these repayable loans should constitute the hard core of basic, dependable support for health professional students with limited resources.

Scholarships: The legislation would provide for a 5-year program of grants to schools of medicine, osteopathy, and dentistry for scholarships to be awarded annually by the schools to their students.

The amount of the grant to each school in the first year of the program would equal $2,000 times one-tenth the number of first-year students in the school. In the second year of the program, the grant would increase to $2,000 times one-tenth the number of first and second year students. In succeeding years the grant would be enlarged until by the fourth and fifth year it equaled $2,000 times one-tenth of the total enrollment of the school.

Scholarships of up to $2,500 could be awarded to individual students. The amount would depend upon need and would be determined by the school. The proposed scholarship grants would enable schools of medicine, osteopathy, and dentistry to compete more equally with other graduate fields for outstanding students. It would also enlarge the group seeking admission to the schools by attracting bright students for whom such costly education even with loans available is not possible without scholarship aid.

A high school graduate who desires to be a doctor must anticipate that his education will cost $20,000 to $30,000 over an 8- to 12-year period. Few scholarships or fellowships are available to medical and dental students.

This high cost is a strong deterrent to young people otherwise eager to become physicians or dentists. In 1963–64 the average annual expense reported by medical students (fees and living expenses) was $3,577—$3,220 at public schools and $3,931 at private schools. For single students, the average expense was about $2,700. For married students—and about two out of five are married—the costs averaged more than $4,800 a year.

A disproportionate number of medical and dental students are drawn from families which are able to pay for 4 expensive years of professional education. Among medical students in 1963, nearly half, 49 percent, were from the 20 percent of the Nation's families having incomes of $10,000 or more. And 29 percent came from the 5 percent of families with incomes of $15,000 or more.

At present, considerable aid is available for graduate study leading toward the Ph. D. degree. More than four-fifths of graduate students in the life sciences received nonrefundable grants in 1962–63, and the average grant was $2,700. In contrast, less than one-third of the medical students in 1963–64 received nonrefundable grants. Of those who did, the average scholarship was only $760.

In the interest of improving the quality of medical personnel as well as of more equal educational opportunity, medicine and dentistry must not become the professions open only to the rich. At the very least, a more nearly equal opportunity should be provided the low-income student to choose medicine or dentistry if he wishes rather than the better supported related fields.

Improvement grants: To turn now from the plight of the students to the plight of the schools. The bill would authorize a new 5-year program of grants to assist schools of medicine, dentistry, and osteopathy to improve the quality of their educational programs.

Grants would be of two types: basic improvement grants and special improvement grants. The bill would authorize the appropriation of $20 million for the fiscal year ending June 30, 1966, for these two types of improvement grants. (This sum is only about 2 percent of the amount of money currently made available by the Federal Government for the support of health research.)

Such sums as may be necessary would be authorized for each of the 4 succeeding fiscal years. (It is estimated that if in the first year $20 million were to be appropriated, about two-thirds would go for basic improvement grants and about one-third for special project grants.)

In the first year of the program, every school meeting accreditation standards would be eligible to receive a basic improvemet grant of $12,500 plus an allowance of $250 for each full-time student. In the second and subsequent years of the program each school would be eligible to receive $25,000 plus an allowance of $500 for each student.

From sums appropriated, but not required for making basic improvement grants, the bill would authorize the Surgeon General to make special improvement grants, on a project basis, to those schools of medicine, dentistry, or osteopathy whose applications for basic improvement grants had been approved, and which have been determined to be in need of additional aid in order to improve the quality of their curriculums. A special improvement grant to a school could not exceed $100,000 for fiscal year 1966, $200,000 for fiscal year 1967, $300,000 for fiscal year 1968, or $400,000 for fiscal year 1969 or 1970.

The number of medical and dental students must be sharply increased if we are to meet the future needs of the Nation for physicians and dentists. The burden of training these students falls on the Nation's medical and dental schools and the costs to these schools of providing high quality training have been steadily mounting.

Medical and dental schools are in jeopardy because of shortages of operating funds. These schools face increasing problems in raising enough operating money to pay their faculty and finance their teaching programs, with tuition and fees representing only a small part of these costs.

Several medical and dental schools are in serious financial difficulty. Other schools are on the border of trouble. Attempts to expand enrollment will only exacerbate these financial difficulties.

Medical and dental schools are in dire need of operating funds just to maintain basic educational programs for their undergraduate students.

Yet increasingly the Nation looks to these schools to broaden their educational responsibilities by providing specialty training to medical graduates, by providing continuing education for practicing physicians, and by providing training for ancillary health workers such as technicians and other paramedical personnel.

Ten years ago medical school faculties taught one intern or resident for every four undergraduate medical students; now the ratio is more than one for every two. Increasing teaching responsibility has also come with the increase in the numbers of clinical fellows, nurses, practicing physicians in continuing education, and a variety of others in allied health professions and services. This is in addition to an expanding group of graduate students in the basic medical sciences, many of whom contribute indirectly to the provision of patient care.

Altogether, undergraduate medical students today constitute less than half of the students (in terms of full-time medical student equivalents) taught in medical schools. To promote the development of high-quality health services generally, medical schools should continue to help educate a broad range of health personnel. But the drain placed by such functions on funds otherwise available for teaching undergraduate medical students must be recognized.

The basic improvement grant would have the effect of relieving the financial stringencies of the poorer schools. It would provide a larger proportion of the budget of these poorer schools than it would of the budgets of schools more adequately endowed. It would directly reward any school that increased its enrollment.

For the underfinanced schools, the special improvement grant would provide the incentive and the means for specific programs and departments within the school to seek the educational standards attained in some of the Nation's outstanding institutions. The better schools could use these grants to develop educational programs in fields now experiencing a rapid expansion of scientific knowledge; for example, in genetics and biophysics. Ideally, programs of this type would generate improved educational objectives, principles, and methodologies which upon adoption would benefit all medical, dental, and osteopathic schools.

National Advisory Council: The bill would also authorize the establishment of a National Advisory Council on Medical and Dental

Education, to advise the Surgeon General in the preparation of regulations and on policy matters arising in the administration of the improvement grant, and scholarship programs and in the review of applications for improvement grants. The Council would consist of the Surgeon General, as Chairman, and 12 members selected from among leading authorities in the field of medical and dental education, except that not less than 3 of such members must be selected from the general public.

Finally, a few technical amendments are proposed which would facilitate the administration of the act and increase its effectiveness.

Mr. Chairman, this proposal embraces components that are so closely related that each affects the other. The construction grants which will help finance new schools as well as expand existing ones will increase the enrollment capacities as professional health schools.

This action, in turn, will create a corresponding need for more faculty which the improvement grants are designed to help meet. The improvement grants will also stimulate the quality of instruction, permitting specific weaknesses to be eliminated in the less favorably financed schools and at the same time encouraging curricular innovations in other schools. Such improvements would have far-reaching effects on professional health education and on the health of the Nation.

Scholarships and loans, too, will have their impact on the quality of medical care. Medicine and dentistry need their share of the best minds of each generation in order to maintain leadership in these professions.

Aid supporting part of the crushing burden of money, time, and energy which now must be borne will surely help in attracting inspired young men and women from low income families to enter medical and dental schools.

Only by attracting students of the highest quality can the Nation provide health care of the greatest excellence.

Mr. Chairman, physicians, dentists, and other medical workers are the indispensable and irreplaceable core at the center of the provision and distribution of medical care.

With the increasing demand for more complete health services, the pressures for more health personnel are great. We cannot legislate today and have more health personnel tomorrow. No matter what is done, we can expect continuing shortages during the next several years, and we must plan with full knowledge of this situation. We must act now to alleviate these shortages.

H.R. 3141 embodies a program for concerted action. We strongly urge its enactment.

Thank you, Mr. Chairman. I will be glad to answer any questions.

The CHAIRMAN. Dr. Dempsey, thank you very much. I wonder if any other members of your group have any other supplemental comments?

Dr. TERRY. We do not, Mr. Chairman. We are here to assist Dr. Dempsey in answering any questions of the committee, but we do not have any prepared statement.

The CHAIRMAN. Thank you very much for your statements.

I was quite interested in the progress that has been made with the program. Very frankly, I am disappointed that it hasn't gotten as far as it was contemplated and was expected.

I can understand, of course, that budgetary problems and planning and so forth would intervene and there would be some delay.

Apparently, out of the 3-year authorized program, you are going to get only 1 year, realistically speaking, underway; is that true?

Dr. DEMPSEY. A little more than 1 year, as I understand the matter.

The full authorized appropriations can be spent, but the period of time over which it could be utilized was compressed because of the appropriations history of the act.

The CHAIRMAN. Well, the bill was signed September 4, 1963. You say there was no appropriation?

Dr. DEMPSEY. Appropriations became available in September 1964.

The CHAIRMAN. Yes, that is right. No moneys were appropriated for fiscal 1964. Then appropriations for fiscal 1965 did not become law until September 4. So we are now in the second year.

In other words, fiscal 1965 will end the end of this month, and so that is 2 years of it gone, isn't it?

Dr. DEMPSEY. Yes, sir.

The CHAIRMAN. Now, how much have you realized out of it, or are you going to for this fiscal year?

Dr. GRANING. Out of the $100 million available, $92 million has already been committed.

The CHAIRMAN. $100 million was made available for fiscal 1965.

Dr. GRANING. The Appropriations Committee combined the two authorizations to give us a total of a hundred million dollars for this fiscal year.

The CHAIRMAN. Combined the two authorizations.

Dr. GRANING. The authorization intended for the first year of operation coupled with the authorization intended for this year of operation. It was $25 million proposed for the first year; $75 million for each of the succeeding years.

The CHAIRMAN. How much?

Dr. GRANING. $75 million for each of the succeeding years. The Appropriations Committee combined the $25 million and the $75 million to give us $100 million.

The CHAIRMAN. And of that amount you have committed $92 million?

Dr. GRANING. Yes, in 7 months of operation. That is as of April 12, 1965, which is following our last council meeting.

The CHAIRMAN. When will you have another council meeting?

Dr. DEMPSEY. On the 24th and 25th of June, sir.

The CHAIRMAN. Can you state whether or not you will commit the other $8 million?

Dr. GRANING. In terms of applications that have been considered by review committees slated to go to council, there are applications far in excess of this.

The CHAIRMAN. Well, I assume that from Dr. Dempsey's statement but—I know it was inadvertent that you didn't request it—you anticipate the other $8 million being committed?

Dr. DEMPSEY. Yes, sir.

The CHAIRMAN. What is the budget request for 1966 fiscal year?

Dr. GRANING. The full extent of the authorization, $75 million.

The CHAIRMAN. $75 million?

Dr. GRANING. Yes, sir.

The CHAIRMAN. Is there request in this bill for more than $75 million for 1966 fiscal year?

Dr. DEMPSEY. No, sir. This requests extensions of the bill and authorization for fiscal 1967.

The CHAIRMAN. I thought I recalled that in the new program there was so much to be included for the fiscal year 1966. Am I mistaken?

Dr. DEMPSEY. There was a request for $20 million for the improvement of medical schools, that is, the basic and special improvement grants for medical schools.

The CHAIRMAN. $20 million for the improvement grants and special grants and that was for?

Dr. DEMPSEY. 1966.

The CHAIRMAN. And that is the only additional funds for fiscal 1966 you are asking for?

Dr. DEMPSEY. We are also asking for scholarship funds for 1966 but not for construction funds in addition to those already authorized.

The CHAIRMAN. Did we provide for scholarship funds?

Dr. DEMPSEY. No, sir. Not in the previous act. You provided loan funds.

The CHAIRMAN. How much in scholarship funds is asked here for 1966?

Dr. DEMPSEY. It is a formula which is one-tenth of the first-year class times $2,000.

The CHAIRMAN. One-tenth of the first-year class?

Dr. DEMPSEY. Of the entering students.

The CHAIRMAN. Of all medical schools?

Dr. DEMPSEY. One-tenth of the first-year class of all schools.

The CHAIRMAN. How do you know what schools will be involved?

Dr. DEMPSEY. All accredited schools, and we have such lists.

The CHAIRMAN. Will you supply that list for the record?

Dr. DEMPSEY. Yes, sir; we will be glad to.

The CHAIRMAN. Could you give an estimate of how much that would be?

Dr. CASHMAN. We shall do so.

(The information was supplied as follows:)

Estimated amount of scholarship grant to each accredited school

State	School	1st year: $2,000× 10 percent of 1st-year enrollment	2d year: $2,000× 10 percent of 1st- and 2d-year enrollment	3d year: $2,000× 10 percent of 1st,- 2d,- and 3d-year enrollment	4th and succeeding years: $2,000× 10 percent of total enrollment
		Schools of medicine (1963–64 enrollment)			
Alabama	Medical College of Alabama	$16,000	$32,000	$46,000	$60,000
Arkansas	University of Arkansas	22,000	38,000	54,000	70,000
California	Loma Linda	18,000	36,000	56,000	76,000
	California College of Medicine	20,000	38,000	56,000	72,000
	UCLA	14,000	28,000	44,000	54,000
	University of Southern California	14,000	26,000	40,000	54,000
	Stanford	14,000	26,000	44,000	58,000
	University of California, San Francisco	20,000	42,000	62,000	82,000
Colorado	University of Colorado	18,000	32,000	50,000	64,000
Connecticut	Yale	16,000	32,000	48,000	64,000

Estimated amount of scholarship grant to each accredited school—Continued

State	School	1st year: $2,000× 10 percent of 1st-year enrollment	2d year: $2,000× 10 percent of 1st- and 2d-year enrollment	3d year: $2,000× 10 percent of 1st-, 2d-, and 3d-year enrollment	4th and succeeding years: $2,000× 10 percent of total enrollment
		Schools of medicine (1963-64 enrollment)			
District of Columbia	Georgetown	$22,000	$46,000	$64,000	$86,000
	George Washington	22,000	40,000	58,000	76,000
	Howard	22,000	42,000	58,000	78,000
Florida	University of Miami	16,000	32,000	46,000	60,000
	University of Florida	12,000	24,000	32,000	42,000
Georgia	Emory University	14,000	30,000	44,000	60,000
	Medical College of Georgia	20,000	38,000	58,000	74,000
Illinois	Chicago Medical School	16,000	28,000	42,000	54,000
	Northwestern	26,000	52,000	76,000	102,000
	Stritch	18,000	26,000	42,000	64,000
	University of Chicago	14,000	30,000	44,000	56,000
	University of Illinois	40,000	78,000	116,000	152,000
Indiana	Indiana University	46,000	82,000	116,000	148,000
Iowa	State University of Iowa	24,000	48,000	68,000	88,000
Kansas	University of Kansas	22,000	44,000	64,000	86,000
Kentueky	University of Kentueky	16,000	30,000	40,000	46,000
	University of Louisville	20,000	38,000	52,000	68,000
Louisiana	Louisiana State University	28,000	54,000	80,000	102,000
	Tulane University	28,000	52,000	78,000	100,000
Maryland	Johns Hopkins	18,000	34,000	52,000	66,000
	University of Maryland	26,000	50,000	68,000	86,000
Massachusetts	Boston University	14,000	28,000	44,000	56,000
	Harvard	24,000	46,000	74,000	100,000
	Tufts	22,000	44,000	64,000	84,000
Michigan	University of Michigan	42,000	82,000	118,000	152,000
	Wayne State	30,000	46,000	60,000	88,000
Minnesota	University of Minnesota	32,000	62,000	94,000	120,000
Mississippi	University of Mississippi	16,000	30,000	42,000	58,000
Missouri	University of Missouri	18,000	34,000	50,000	64,000
	St. Louis University	26,000	48,000	68,000	88,000
	Washington University	18,000	34,000	52,000	68,000
Nebraska	Creighton	16,000	30,000	44,000	58,000
	University of Nebraska	18,000	34,000	48,000	64,000
New Jersey	Seton Hall	16,000	32,000	40,000	60,000
New York	Albany Medical College	14,000	26,000	38,000	52,000
	State University, Buffalo	22,000	42,000	56,000	72,000
	Columbia University	24,000	48,000	72,000	94,000
	Cornell University	18,000	34,000	50,000	68,000
	Albert Einstein, Yeshiva	20,000	34,000	56,000	74,000
	New York Medical College	26,000	50,000	74,000	98,000
	New York University School of Medicine.	26,000	50,000	76,000	102,000
	State University Downstate Medical Center, Brooklyn.	36,000	66,000	98,000	126,000
	University of Rochester	14,000	28,000	42,000	54,000
	State University Upstate Medical Center, Syracuse.	20,000	38,000	52,000	68,000
North Carolina	University of North Carolina	14,000	28,000	42,000	52,000
	Duke University	16,000	34,000	52,000	68,000
	Bowman Gray-Wake Forest	12,000	20,000	30,000	40,000
Ohio	University of Cincinnati	20,000	40,000	58,000	76,000
	Western Reserve	16,000	34,000	50,000	64,000
	Ohio State University	30,000	38,000	86,000	106,000
Oklahoma	University of Oklahoma	22,000	42,000	62,000	80,000
Oregon	University of Oregon	16,000	32,000	50,000	64,000
Pennsylvania	Hahnemann Medical	22,000	42,000	60,000	78,000
	Jefferson Medical	36,000	68,000	98,000	130,000
	Temple University	28,000	54,000	78,000	104,000
	University of Pennsylvania	26,000	52,000	70,000	100,000
	Woman's Medical College	12,000	26,000	34,000	44,000
	University of Pittsburgh	20,000	40,000	58,000	74,000
Puerto Rico	University of Puerto Rico	12,000	20,000	30,000	38,000
South Carolina	Medical College of South Carolina	16,000	32,000	48,000	64,000
Tennessee	University of Tennessee	42,000	80,000	110,000	148,000
	Meharry Medical	14,000	26,000	36,000	48,000
	Vanderbilt University	10,000	22,000	32,000	40,000
Texas	University of Texas, Southwestern	22,000	40,000	58,000	76,000
	University of Texas, Galveston	30,000	58,000	84,000	108,000
	Baylor University	16,000	34,000	50,000	64,000
Utah	University of Utah	12,000	22,000	34,000	42,000
Vermont	University of Vermont	10,000	20,000	28,000	38,000
Virginia	University of Virginia	16,000	32,000	44,000	58,000
	Medical College of Virginia	18,000	32,000	48,000	64,000
Washington	University of Washington	16,000	30,000	44,000	58,000
West Virginia	West Virginia University	12,000	24,000	36,000	44,000
Wisconsin	University of Wisconsin	22,000	42,000	58,000	76,000
	Marquette	22,000	40,000	60,000	80,000

Estimated amount of scholarship grant to each accredited school—Continued

State	School	1st year: $2,000× 10 percent of 1st-year enrollment	2d year: $2,000× 10 percent of 1st- and 2d-year enrollment	3d year: $2,000× 10 percent of 1st-, 2d-, and 3d-year enrollment	4th and succeeding years: $2,000× 10 percent of total enrollment
		2-year schools of medicine (1963–64 enrollment)			
New Hampshire	Dartmouth	$10,000	$18,000	$18,000	$18,000
North Dakota	University of North Dakota	8,000	18,000	18,000	18,000
South Dakota	State University of South Dakota	10,000	18,000	18,000	18,000
		Schools of osteopathy (1963–64 enrollment)			
Illinois	Chicago College of Osteopathy	$14,000	$24,000	$34,000	$48,000
Iowa	College of Osteopathic Medicine and Surgery (Des Moines)	16,000	30,000	46,000	58,000
Missouri	Kansas City College of Osteopathy	20,000	40,000	60,000	76,000
	Kirksville	20,000	38,000	58,000	72,000
Pennsylvania	Philadelphia	18,000	36,000	50,000	66,000
		Schools of dentistry (1964–65 enrollment)			
Alabama	Alabama	$10,000	$20,000	$30,000	$38,000
California	Pacific (P. & S.)	12,000	22,000	32,000	47,000
	California (San Francisco)	14,000	30,000	44,000	60,000
	California (Los Angeles)	6,000	12,000	18,000	22,000
	Southern California	20,000	40,000	60,000	78,000
	Loma Linda	12,000	14,000	32,000	40,000
District of Columbia	Georgetown	20,000	40,000	60,000	76,000
	Howard	16,000	30,000	42,000	52,000
Georgia	Emory	16,000	30,000	44,000	58,000
Illinois	Loyola (Chicago)	18,000	36,000	52,000	72,000
	Northwestern	18,000	30,000	42,000	56,000
	Illinois	18,000	36,000	52,000	66,000
Indiana	Indiana	20,000	36,000	54,000	72,000
Iowa	Iowa	12,000	22,000	32,000	42,000
Kentucky	Kentucky	10,000	20,000	28,000	36,000
	Louisville	12,000	22,000	32,000	44,000
Louisiana	Loyola (New Orleans)	12,000	22,000	32,000	44,000
Maryland	Maryland	20,000	40,000	60,000	78,000
Massachusetts	Harvard	2,000	6,000	8,000	10,000
	Tufts	20,000	40,000	60,000	78,000
Michigan	Detroit	16,000	32,000	56,000	68,000
	Michigan	18,000	36,000	50,000	66,000
Minnesota	Minnesota	22,000	42,000	60,000	80,000
Missouri	St. Louis	12,000	22,000	32,000	42,000
	Missouri (Kansas City)	24,000	44,000	68,000	92,000
	Washington (St. Louis)	10,000	20,000	30,000	36,000
Nebraska	Creighton	10,000	18,000	28,000	36,000
	Nebraska	8,000	14,000	20,000	28,000
New Jersey	Fairleigh-Dickinson	10,000	20,000	28,000	36,000
	New Jersey (Seton Hall)	10,000	20,000	28,000	34,000
New York	Columbia	8,000	16,000	20,000	26,000
	New York University	34,000	68,000	100,000	130,000
	New York (Buffalo)	14,000	26,000	38,000	48,000
North Carolina	North Carolina	10,000	20,000	26,000	38,000
Ohio	Ohio	30,000	60,000	88,000	116,000
	Western Reserve	12,000	24,000	36,000	48,000
Oregon	Oregon	16,000	32,000	46,000	60,000
Pennsylvania	Temple	26,000	52,000	76,000	100,000
	Pennsylvania	28,000	50,000	72,000	94,000
	Pittsburgh	20,000	40,000	56,000	74,000
Tennessee	Meharry	6,000	12,000	14,000	18,000
	Tennessee	22,000	42,000	58,000	78,000
Texas	Baylor	18,000	36,000	54,000	72,000
	Texas	20,000	40,000	60,000	80,000
Virginia	Medical College of Virginia	16,000	30,000	44,000	58,000
Washington	Washington (Seattle)	16,000	26,000	38,000	52,000
West Virginia	West Virginia	10,000	22,000	28,000	32,000
Wisconsin	Marquette	24,000	48,000	70,000	92,000
Puerto Rico	Puerto Rico	6,000	12,000	16,000	24,000

The CHAIRMAN. Now, in 1963, you set out in support of this a program for 1964, 1965, 1966, 1967, and 1968. Now, are you requesting more funds to meet the need under this program in 1967 and 1968 than you requested in 1963?

Dr. DEMPSEY. Yes, sir.

The CHAIRMAN. How much more?

Dr. DEMPSEY. I will be glad to supply that.

The CHAIRMAN. I wish you would supply for the record something like the table of estimates that would be required on an annual basis as was provided in 1963, at which time you set out estimated funds to be required for grants, for construction, student loans, administration. And then the expenditures for construction and so forth of teaching facilities. That is it, I suppose, the expenditures in connection with carrying out the program?

Dr. DEMPSEY. Yes, sir. We will be glad to work with the committee in supplying these estimates, sir.

The CHAIRMAN. I would also like for you to supply the committee with what you think would be a realistic factual figure for each of these years. I do believe, Doctor, that we ought to try to instill in the minds of the agencies that this committee, and largely other committees of the Congress, has decided against any further open end authorizations.

We have had that experience in the past and we have seen what has resulted, not only in the program itself, but in the caustic criticism that has come from many sources. And I think we had better think in terms of what is required and also I think we should think in terms that a new look and a new consideration of the problem about every 3 years is a pattern that has been set by the committee.

Now, as I say, you were a little slow in getting off, and that was not your fault. It was just that situation is in part the Congress' fault. We did not get the thing concluded until well into the fiscal year of 1964. Then you had to start planning again.

It is very easy to understand why, but now you are going and you should get the full impact of what the next 4 years would be if we were to work out a program on the basis of a 3-year extension.

And I wish you would think in terms of this approach and in terms of what, in these various categories, would be necessary to meet the requirements from such information as you have today.

And your information should be fairly complete in view of the fact that you already have these applications submitted by the schools.

Dr. DEMPSEY. I will be glad to supply to the committee the best estimates we can make at this time, sir.

(The information was supplied as follows:)

SUMMARY

Program: Health Professions Educational Assistance Amendments of 1965

[In thousands of dollars]

Item	Approximate additional cost, 1966–70				
	1966	1967	1968	1969	1970
Appropriation requirements:					
Grants	22,893	230,858	244,106	257,539	258,950
Direct operations	325	1,143	1,273	1,273	1,308
Total	23,218	232,001	245,379	258,812	260,254
Expenditures:					
Grants	16,235	78,308	122,558	212,971	258,574
Direct operations	305	1,088	1,208	1,268	1,298
Total	16,540	79,396	123,766	214,239	259,872
Positions	29	86	96	96	96
Man-years	20	80.7	91.7	91.7	94

Program: Extension of construction program for medical, dental, and other schools

[Dollars in thousands]

Item	Approximate additional cost, 1966–70				
	1966 [1]	1967	1968	1969	1970
Appropriation requirements:					
Grants		$160,000	$160,000	$160,000	$160,000
Direct operations		650	780	780	780
Total		160,650	160,780	160,780	160,780
Expenditures:					
Grants		16,000	48,000	128,000	160,000
Direct operations		600	720	780	780
Total		16,600	48,720	128,780	160,780
Positions		50	60	60	60
Man-years of employment		46	57	57	57

[1] Excludes amounts carried in the 1966 budget estimate under existing legislation as follows:

	Thousands
Grants	$75,000
Direct operations	510
Total	75,510
Positions	39

Program: Extension of program for medical and dental student loans

[Dollars in thousands]

Item	Approximate additional cost, 1966–70				
	1966 [1]	1967	1968	1969	1970
Appropriation requirements:					
Grants		$25,200	$25,800	$26,600	$27,600
Direct operations		88	88	88	123
Total		25,288	25,888	26,688	27,723
Expenditures:					
Grants		25,200	25,800	26,600	27,600
Direct operations		88	88	88	118
Total		25,288	25,888	26,688	27,718
Positions		7	7	7	10
Man-years of employment		6.7	6.7	6.7	9

[1] Excludes amounts carried in the 1966 budget estimate under existing legislation as follows:

	Thousands
Grants	$15,400
Direct operations	88
Total	15,488
Positions	

Program: Loans to institutions under sec. 744, Public Health Service Act

Item	Approximate additional cost, 1966–70				
	1966	1967	1968	1969	1970
Appropriation requirements:					
Loans	235,000	450,000	550,000	615,000	650,000
Direct operations	0	0	0	0	0
Total	235,000	450,000	550,000	615,000	650,000
Expenditures:					
Loans	235,000	450,000	550,000	615,000	650,000
Direct operations	0	0	0	0	0
Total	235,000	450,000	550,000	615,000	650,000

Program: Scholarship grants to schools of medicine, osteopathy, or dentistry

[In thousands of dollars]

Item	Approximate additional cost, 1966–70				
	1966	1967	1968	1969	1970
Appropriation requirements:					
Grants	2,658	5,208	7,756	10,324	10,700
Direct operations	45	55	55	55	55
Total	2,703	5,263	7,811	10,379	10,755
Expenditures:					
Grants	0	2,658	5,208	7,756	10,324
Direct operations	40	50	50	50	50
Total	40	2,708	5,258	7,806	10,374
Positions	4	4	4	4	4
Man-years of employment	3	4	4	4	4

Program: Educational improvement grants to schools of medicine, dentistry, and osteopathy

[In thousands of dollars]

Item	Approximate additional cost, 1966–70				
	1966	1967	1968	1969	1970
Appropriation requirements:					
Grants	20,000	40,000	50,000	50,000	60,000
Direct operations	280	350	350	350	350
Total	20,280	40,350	50,350	60,350	60,350
Expenditures:					
Grants	16,000	34,000	43,000	50,000	60,000
Direct operations	265	350	350	350	350
Total	16,265	34,350	43,350	50,350	60,350
Positions	25	25	25	25	25
Man-years of employment	17	24	24	24	24

The CHAIRMAN. Mr. Nelsen.

Mr. NELSEN. Page 13, your basic improvement grant of $12,500 for each full-time student. Is this figure, $12,500, for each year they will get this basic improvement grant of $12,500 plus $250 allowance. That is annually for the number of students that are enrolled, is that true?

Dr. DEMPSEY. Those are figures for the first year.

Mr. NELSEN. They will be down then?

Dr. DEMPSEY. No. The first year will be $250; the second year, $500 per student; and the third year, the same as the second year.

Mr. NELSEN. Then, in addition to that will be $2,500 maximum loan available for each student?

Dr. DEMPSEY. Yes, sir.

The CHAIRMAN. That doesn't necessarily mean they are going to get $2,500, but that is the maximum.

Dr. DEMPSEY. Up to that amount.

Mr. NELSEN. I was wondering about tuition cost of school in view of the fact the basic improvement grant comes in plus so many dollars per student. Are we to assume the possibility the amount charged to the student will be reduced to some degree because of this outside help coming to the school?

Dr. DEMPSEY. I would frankly doubt it, sir, because of the cost to the schools, the cost of educating each student for a year, is rather far above the tuition which the school charges.

So even the contributions that would be made by these basic improvement grants would not close the gap.

Mr. NELSEN. I was hoping there would be the possibility that there would be a reduction because for a young man going into medicine to look forward to repaying a loan at the end of his education period of $20,000 to $30,000 is quite a bit of a burden, and it may have a deterrent effect on a young person if they start having in mind that this will have to be repaid some day.

Dr. DEMPSEY. It is for that reason, among others, that we are also strongly recommending the outright grant to the student, the scholarships.

Mr. NELSEN. Thank you. No more questions.

Mr. O'BRIEN. I would like to ask one question under the existing circumstances. Isn't it much easier for a young person without great family means to obtain a scholarship or grant in many other fields to a greater extent than in the field of medicine?

Dr. DEMPSEY. Yes, sir. In the life sciences, that is, in biophysics or biochemistry or any of the specialties which relate to biology and medicine, four-fifths of the graduate students have scholarships or other nonrefundable grants averaging the large amount of $2,700 a year. So it is easily possible for a student obtaining a Ph. D. to have nearly full payment of his expenses during his graduate training. This is not so in the field of medicine and dentistry.

Mr. O'BRIEN. But doesn't this tend to distract a young person from a family of limited means from his medical ambition to one of these other fields?

Dr. DEMPSEY. We believe it has. The family income, the average income of the families of the medical students has been steadily rising in the last several years until half of the students come from families with incomes of $10,000 or more. And nearly 30 percent of them are from families of $15,000 a year or more.

We think the reason for this steady rise is largely that the students from poorer families are in fact going into graduate study in these other areas.

Another piece of evidence that we have that is of great concern to us is that 10 years ago, more than 20 years, I think, if I remember correctly, 23 percent of all students entering medical schools had straight A averages. And today the percentage has fallen to somewhere around 12 percent. So there has been a deterioration in quality of the students going to medical schools, as these bright people have been deflected into areas other than medicine.

Mr. O'BRIEN. We use the figure—I suppose we have to pick some figure—but we use the figure $10,000, so that anything above that is of rather substantial income. But isn't it a fact that families with income of $10,000 or $12,000 or even $15,000, with several children to educate, that the cost for a medical education for one of those children would be an almost intolerable burden?

Dr. DEMPSEY. It would indeed, sir.

Mr. O'BRIEN (presiding). Mr. Satterfield?

Mr. SATTERFIELD. I have no questions.

Mr. O'BRIEN. Mr. Carter.

Mr. CARTER. No questions.

Mr. GILLIGAN. Mr. Chairman, to go back to the questions you were raising before of this disparateness between the scholarship assistance available to students of medical science and those which we are referring to here as the life sciences, on page 11, Dr. Dempsey, you make reference to the fact that four-fifths of graduate students in the life sciences received nonrefundable grants in 1926–63, and the average grant was $2,700. What is the source of these nonrefundable grants? I assume they were not solely Federal funds.

Dr. DEMPSEY. In a large part they were Federal funds. In addition, there are, of course, private funds that many institutions have for scholarships for students in these fields.

There are, of course, private funds for scholarships for medical and dental students. I have some figures that illustrate the amount of these.

In the years under discussion, 81 percent of the graduate students in the life sciences received scholarships or other nonrefundable grants which averaged $2,700 a year, and 29 percent of medical students had scholarships which averaged $760 a year. And 15 percent of dental students got scholarships which averaged $425 a year. And 6 percent of osteopathic students got scholarships that averaged $950 a year.

So the amount of scholarship aid per student is much less in medicine, dentistry, and osteopathy, than it is among the graduate students in the life sciences. And the percentage of the students to whom these even smaller funds are available is very much less.

And finally, most of the scholarships for medical, dental, and osteopathic students come from private sources, whereas Federal funds are largely responsible for the very much more favorable position of the graduate students.

Mr. GILLIGAN. You use the term "largely." Have you any estimate, Mr. Dempsey, of the 91 percent of the graduate students in the life sciences who are receiving scholarships of impressive size, $2,700 a year as an average, what percentage of those are receiving Federal funds?

Dr. DEMPSEY. I don't have it at the moment, but I shall try to get that information for the committee, if you wish.

Mr. GILLIGAN. Would you have any estimate of scholarships available for graduate students available in the physical sciences, let's say, or in the humanities, as compared to the life sciences?

Dr. DEMPSEY. I think that the situation in other graduate fields is largely comparable to that in the life sciences.

Mr. GILLIGAN. If your suspicions are well founded, I think it might be very helpful to the committee to know that because it would suggest that the Federal Government, which is strongly supporting advanced work, graduate work, in these other fields, has in fact been neglecting the very important field of the medical sciences.

If this is the case, it seems to me to represent a very strong support to the bill here, H.R. 3141.

Dr. DEMPSEY. I would be glad to get the information that you mentioned here and provide it for the committee. And my suspicion is that it will indicate the facts that you brought out and I think one can make the statement perhaps even more strongly than that the support of the Government in other fields has led to the neglect of the medical and dental fields. It has injured them to some degree.

Mr. GILLIGAN. As a nation, following sputnik, we decided it was in the national interest to produced trained men in the fields of physical sciences and so forth, and we put forward that effort to do it.

If this Nation believes that it is in the interest of the people to promote the growth of the medical sciences and the development of medical people, it seems to me we can and should do the job.

Again, as I say, I think it would be interesting to the committee to have some parallel cases drawn and some statistics brought forward which might indicate the difference in the program.

(The information requested follows:)

A study of gradnate students conducted by the National Opinion Research Center in 1962–63 showed that in that year 81 percent of the students in the life sciences had nonrefundable grants averaging (median) $2,700 a year; 75 percent of the students in the physical sciences, grants averaging $2,646; 64 percent of the students in the behavioral sciences, grants averaging $2,350; 62

percent of the students in the engineering field, grants averaging $2,200; and 47 percent of the students in the humanities, grants averaging $2,000 (Seymour Warkov, "Subsidies for Graduate Students," National Opinion Research Center, Rept. 97, March 1964).

In some fields the proportion of students supported from Federal sources is high. For example, a recent NIH survey of 80 leading graduate schools showed that in 1963–64 more than 40 percent of all graduate students in the basic medical sciences—the disciplines most closely allied to medicine—had stipends from the National Institutes of Health alone. This included only students with direct (predoctoral fellowship) or indirect (traineeships under training grants) stipends. It did not include a substantial number of students employed under NIH research grants or contracts. Nor did it include any students supported by stipends or employed under grants or contracts from other Federal agencies such as the National Science Foundation, the Atomic Energy Commission, and the National Aeronautics and Space Agency.

Today a small number of senior medical and dental students are commissioned by and receive support from the military services, upon agreeing to serve a specified period of active duty in the Armed Forces. There is also a small program of summer research fellowships for medical and dental students administered by the Public Health Service. Except through these programs, however, the Federal Government for all practical purposes provides no nonrefundable support to medical and dental students. The 29 percent of all medical students and the 15 percent of all dental students receiving nonrefundable grants from any source, averaging $760 and $425, respectively, are helped almost entirely from State, local, or private sources.

Mr. O'BRIEN. Doctor, you mentioned the chemistry field. Isn't it a fact—and this is largely repetition of my previous question—isn't it a fact that a number of young people whose first inclination would be the medical sciences actually are siphoned off through sheer economic necessity by the more alluring grants in these other fields?

Dr. DEMPSEY. I am sure that is so. I can give you individual examples of this. In fact, this to some degree was so in my own case at one stage in my career.

I am not sure that one can get accurate statistics on this matter because to do so would require interviewing almost all the present medical students in college, or those who were thinking about it in high school.

I am sure your observation is correct, however.

Mr. O'BRIEN. I have one further question. In the 1963 act, under the construction provisions, we took care of at least one area, the podiatrist. Why are they not including podiatrist under the scholarship provisions?

Dr. DEMPSEY. We are, as you know, attempting to make judgments as to the most necessary places to provide support. The bill that we propose here does not meet all of the national needs in the United States. It is necessary to assign some priorities, and in the best judgment that we were able to make, we need to take into account the requirements of medical students, dental and osteopathic students first. This is the reason we did not include other specific groups.

Mr. O'BRIEN. Doctor, you mentioned the fact that, unlike a great many other schools, the medical and dental schools are teaching many people who are not undergraduates. You referred to physicians who are practicing physicians, providing specialty training and continuing education and so forth.

If the situation is as bad as you pictured it on page 13 where you said medical and dental schools are in jeopardy because of the shortage of operating funds and the increasing problems in raising enough operating money to pay their faculty—now, isn't it possible that if

that situation were allowed to continue and it became even more critical, that these schools in many instances would be forced to return to the training only of undergraduate students and curtail those other operations they are now conducting?

Dr. DEMPSEY. Yes; this would be true of some, but I actually feel that some of the schools wouldn't be able to survive without additional sources of operating funds. They are in a condition which is financially bad enough, so they are having difficulty in maintaining the necessary faculty. And they also are in condition bad enough so they have been warned by accreditation teams of the joint accreditation committee, which periodically examine medical schools, that they must improve themselves, or they face the loss of their accreditation.

Mr. O'BRIEN. I understand that, but nevertheless, these other funds are otherwise available for teaching medical students?

Dr. DEMPSEY. Yes, indeed.

Mr. O'BRIEN. If it came to a question of survival, going out of business, wouldn't these schools be forced to return just to the training of undergraduate students and more or less throw the other activity overboard?

Dr. DEMPSEY. This would happen, and has happened in the schools, as they have faced more and more stringent conditions.

It is, however, an impractical solution to their problems because it causes the school to go into a descending spiral of excellence. It is impossible to get first rate people to remain on the faculty in a situation like this, and the quality of the teaching program tends to deteriorate.

Mr. O'BRIEN. I am not suggesting, doctor, that it be done.

Dr. DEMPSEY. Oh, I understand that entirely.

Mr. O'BRIEN. Actually I think it would be a great tragedy for our medical schools, and would be mournful to all the people. I brought it out because it is indication that your medical schools are doing far more than just training young people to be doctors and dentists.

Dr. DEMPSEY. I agree with you entirely.

Mr. GILLIGAN. Mr. Chairman, would you yield to me?

I know from firsthand experience of this kind of trend. We have in Cincinnati the University of Cincinnati Medical School. And the unversity is one of the oldest municipal universities in the country.

The medical school is actually siphoning money out of the rest of the university, because if they set the medical college tuition as a proper level commensurate with the expense of training a medical student, it would be so unrealistically high no one could pay it. The university students are actually subsidizing the medical students, to a very large degree.

Mr. CARTER. Who would appoint the National Advisory Council?

Dr. DEMPSEY. The Surgeon General, with the approval of the Secretary of Health, Education, and Welfare.

Mr. O'BRIEN. If there is nothing further, we will adjourn until tomorrow.

(Whereupon, at 11:30 a.m., the subcommittee was recessed, to reconvene June 9, 1965 at 10 a.m.)

HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE AMENDMENTS OF 1965

WEDNESDAY, JUNE 9, 1965

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON PUBLIC
HEALTH AND WELFARE OF THE
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:15 a.m., in room 2123, Rayburn House Office Building, Hon. Oren Harris (chairman) presiding.

The CHAIRMAN. The committee will come to order.

In resuming the hearings on H.R. 3141 and similar bills today we are honored and privileged to have many important educators and those associated with educational institutions throughout the country and others here to be heard.

It will be the purpose of the committee to accommodate all of you, we hope, and we will try to do so, recognizing the situation with which we are faced this morning.

I think probably our colleagues on the committee will take cognizance of the fact that the House will go in at 11 o'clock and perhaps refrain from any extended questioning. On the other hand, I would like to suggest to those of you who are here that you, too, recognize the situation, that you might be able to brief your remarks and include your prepared statements in the record.

First, we are pleased to welcome Dr. Robert Howard, dean of the Medical School of the University of Minnesota.

Dr. Howard, I believe you have with you Dr. Robert Berson, executive director of the American Medical Colleges, who presently is here in Washington.

Dr. Berson, I followed your trail all around the South and the Southwest and here in Washington and other places.

We are pleased to have you with us.

STATEMENTS OF DR. ROBERT HOWARD, DEAN, MEDICAL SCHOOL, UNIVERSITY OF MINNESOTA, AND DR. ROBERT C. BERSON, EXECUTIVE DIRECTOR, ASSOCIATION OF AMERICAN MEDICAL COLLEGES

Dr. HOWARD. Mr. Chairman and gentlemen, I am pleased to be here and to speak to H.R. 3141 on behalf of the Association of American Medical Colleges. This is an important bill that you have under consideration. The stake of American medical education in it is an

important one. As a manifestation of this stake I would like to call the committee's attention to the presence of a large number of medical educators and administrative officers of other schools, many of whom have come long distances to be here to speak or at least to show their presence in support of this bill.

We have with us from the University of Oklahoma Dr. Robert Bird; of the University of Arizona, Dr. Monte DuVal; Boston University, Dr. Frank Ebaugh; Dr. Douglas Surgenour, of Buffalo; Dr. J. Frederick Eagle, of Columbia; Dr. Glen Leymaster, of Woman's Medical, California; Dr. Robert Bucher, of Temple; Dr. Frank McKee of Rochester; Dr. Julius Richmond of Upstate Medical Center, New York; Dr. Cecil Wittson of Nebraska; Dr. Walter Hard, of South Dakota; Dr. Charles Fischel, of the University of Louisville; Dr. Manson Meads, of Bowman-Gray; Dr. Maston Callison, of Tennessee; Dr. Richard Noback, of Missouri; Dr. Earnest Gardner, of Wayne State in Michigan; Dr. John Parks, of your own George Washington School here; Dr. Lad Grapski, of Stritch-Loyola; Dr. Ed Andrews, of Vermont; Dr. William Knisely, of Michigan State; Dr. William Fleeson, of the University of Connecticut; Dr. Douglas Walker, of Hopkins; and Dr. E. Croft Long, of Duke.

I may have missed some. This was a list as of a few moments ago. But this is testimony.

The CHAIRMAN. You might hand that list to the reporter if you will.

Dr. HOWARD. I shall do so.

The CHAIRMAN. Doctor, should any of these gentlemen desire to include in the record statements expressing their views, they may do so, and their statements will be included at the appropriate place.

Dr. HOWARD. Thank you very much, sir.

This is, I think, testimony to the interest of all American medical education in the passage of this legislation.

I think that members of the committee, in general, are familiar with the statement of policy of the Association of American Medical Colleges concerning Federal support of medical education and, in particular, in support of this kind of medical support as represented in H.R. 3141.

A copy of the association's policy statement originally adopted in January of 1961 has been filed as a part of my written testimony.

I think it is clear that in the last several years there has been increasing awareness on the part of the American public of its concern over health matters and awareness of a relative shortage of physicians. These matters were spoken to with clarity by the President in his message to Congress on the 7th of January 1965, where he pointed out this concern and he pointed out the shortage of physicians which has been very real and has been of interest and concern to all of us responsible for medical education these past several years.

This shortage or this need for more manpower will be even more severe in the future, if we are to develop programs such as those that are envisioned in the DeBakey report. The medical complexes for dealing with the killer diseases will require even more physicians than are now needed, and I think that it is appropriate that real attention be given to this matter of strengthening the Nation's ability to provide opportunities for medical education.

In 1963 the health profession's educational assistance amendment was passed and has been in actual operation for the last year. This provided $175 million total for support of construction of schools of medicine, dentistry, public health, nursing, optometry, and pharmacy. This was $175 million over a 3-year period.

During the past year I have been privileged to serve as a consultant to the Public Health Service and have visited some 10 schools that had put in applications for support under this act. In two or three of these instances they were brandnew schools. In the remainder they represented schools that were increasing their capacity for medical education.

I could not help but be impressed by what this act had done in stimulating these schools either to develop as new schools or to increase their enrollments.

The total new physicians—the total new places in medical schools represented by just these 10 schools that I was privileged to visit was something in the neighborhood of 400, and this is just in 1 year's time.

So you can see that the impact of this act was a very real one, and in just 1 year's time, then, there had been a considerable move forward on the part of the Nation's schools for the development of more educational opportunity.

I would like to call your attention to the fact that medical schools have, to date, either put in specific applications or filed letters of intent totaling more than $400 million of requests in suport of construction of facilities. It would require maximum funds in an amount of slightly more than that, I suppose in the neighborhood of $500 million, based on present kinds of programs. But this is a very substantial contribution on the part of schools and their States that support them or their private endowments, and replies again reflect this national interest in this problem.

So I am here, among other things, to urge that the construction feature of H.R. 3141 be passed; that it be increased in its amount to meet these growing needs. We do strongly support the provisions of this legislation and the administration's position with respect to this which asks for an extension over a 4- or 5-year period.

We do, however, recognize that Congress has at times indicated an interest in applying some sort of limitations on such programs, and we would urge that if it does that it appropriate no less than $160 million for each year of the period in which it hopefully will extend the act.

I would like to speak briefly to the portion of the act that relates to provision for student loans. We also urge the extension of the student loan program and that the amount which may be loaned to individual students in any given academic year be increased from $2,000 to $2,500 per year. This would conform with what is possible for other students under the National Defense Education Act.

This program, too, in a year's time has proved very helpful and very popular, and the funds that were made available during this last year were sufficient only to meet 57 percent of the requests made by students.

One of the things we are interested in is extending the possibility to go to medical school to students who come from families of rela-

tively modest incomes and clearly this kind of act will help them do that.

Dr. Berson is going to speak to the other aspects of this bill and, in particular, I think he is going to say things about the provisions of the bill that would provide general support for medical schools, and this, too, I would want to go on record as saying is badly needed and if medical schools with rapidly rising costs are to be able to meet the needs of the future some form of support of this kind is clearly in order.

Thank you very much.

The CHAIRMAN. Dr. Howard, you refer to the supplement to your statement, the preamble, the policy of the Association of American Medical Colleges. This may be included with your statement as you have submitted it for the record.

Dr. HOWARD. Yes, sir. Thank you, sir.

(The prepared statement of Dr. Robert Howard follows:)

STATEMENT ON BEHALF OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES

I am Dr. Robert Howard, dean of the Medical School of the University of Minnesota and vice president of the Association of American Medical Colleges, for whom I speak on this occasion. I would like to tell the committee on what basis I can speak for all of the medical schools concerning this legislation, make a general statement about its importance, and some specific comments concerning the construction grants and the student loan portions of the bill. If it is agreeable to the committee, I would then like for Dr. Robert Berson, immediate past president of the association and now its executive director, to make some comments on the physician-to-population ratio and on the portions of the bill that deal with basic and special improvement grants for schools of medicine, dentistry, osteopathy, and public health, and scholarships for students.

My confidence that I can reflect the views of the 87 medical schools in this country is based on the fact that this legislation is entirely consistent with the statement of policy concerning Federal support of medical education which the institutional members of the association adopted in January 1961, without a dissenting vote, and have repeatedly endorsed since then. I am including the full text of this statement of policy as an appendix to my written testimony.

As President Johnson said in his message to Congress on January 7, 1965:

"The advance of our Nation's health in this century has in the final measure been possible because of the unique quality and fortunate quantity of men and women serving in our health professions. Americans respect and are grateful for our doctors, dentists, nurses, and others who serve our Nation's health. But it is clear that the future requires our support now to increase the quantity and insure the continuing high quality of such vital personnel.

"In all sectors of health care the need for trained personnel continues to outstrip the supply * * *.

"While we must build new medical and dental schools, we must also retain and sustain the ones we have. To be neglectful of such schools would be wasteful folly.

"We must face the fact that high operating costs and shortages of operating funds are jeopardizing our health professions educational system * * *. Several underfinanced medical and dental schools are threatened with failure to meet educational standards. New schools are slow to start, even when construction funds are available, due to lack of operating funds * * *. Traditionally our medical profession has attracted outstanding young talent, and we must be certain that this tradition is not compromised. We must draw the best available talent into the medical profession. Half of last June's medical school graduates came from families with incomes of over $10,000 a year. The high costs of medical school must not deny access to the medical profession for able youths from low- and middle-income families. Unmet health needs are already large. American families are demanding and expecting more in Federal health services."

In my opinion, this is the most important health legislation the Congress will consider in this session, because it deals with factors that are essential to assuring the continued high quality of education in the health professions, providing an opportunity for some young people from families of low and medium

income to pursue education in these fields, and providing an increased supply of practitioners and highly trained specialists to meet the growing demands for more rapid progress in the conquest of "killer" diseases, making further improvement in medical care and making the best of medical care more widely available to the public. There are strong indications that the demand for physicians' services now exceeds the supply. Such measures as hospital insurance for the aged under social security will further increase the demand and so will other measures being considered now by the Congress.

On the recommendation of your committee, the 88th Congress took a great step forward in the passage of the Health Professions Educational Assistance Amendments of 1963, which is now in operation as Public Law 88–129. As you know, that legislation authorized a 3-year program of matching grants toward the construction of schools of medicine, dentistry, public health, nursing, optometry, and pharmacy, and authorized the appropriation over the span of the 3 years of $175 million for this purpose.

At the time that legislation was being considered, our association recommended that it be a 10-year program and that the authorization of funds be somewhat higher after the first 2 years of the program.

Funds to implement this program did not become available until the fall of 1964, but applications are already on file for Federal grants totaling $299 million toward the construction of facilities costing a total of approximately $584 million. In addition, letters of intention to file applications, which include cost figures, request a Federal share totaling $305 million toward the construction of facilities costing about $552 million. Medical schools have filed applications for a total of $209 million as the Federal share toward facilities costing a total of $412 million and have sent in letters of intention to apply for a total of $239 million toward facilities costing a total of $417 million.

The applications on file, plus those letters of intent which are specific about the expansion of enrollment involved, indicate the creation of 465 additional first-year places in entirely new medical schools and 505 places in medical schools in which plans for expansion of enrollment are pretty definite. As the plans of institutions become more definite, we are confident that a considerable further expansion of enrollment will be provided.

I think it is worthy of some emphasis that the existence of this program even in its first year of operation has stimulated the flow of funds from other sources to match Federal funds. The applications on hand indicate that funds from non-Federal sources in the amount of $305 million will be used to match $299 million of Federal funds for this badly needed construction.

The figures above indicate that there is a clear and pressing need to extend this construction program and increase the amount of funds available for it each year. We strongly support the provisions of this legislation, which would extend the program for 5 years and would authorize the appropriations of such funds as may be needed for each of those years. If the committee finds that some ceiling must be placed on the appropriations, we would strongly urge that the ceiling not be less than $10 million for each of the 5 years.

EXTENSION OF, AND IMPROVEMENTS IN, PROGRAM FOR STUDENT LOANS

Section 4 of this legislation will extend the student loan program for 5 years and raise the amount which may be loaned to any one student in any one academic year from $2,000 to $2,500 per year.

As with the construction program, the response to the student loan program was immediate and marked, although it did not get underway until the fall of 1964. The request for student loans was so great that the Federal funds available were sufficient to meet only 57 percent of the requests in the fiscal year 1965. The present indications are that during fiscal year 1966 the Federal funds authorized will be sufficient to meet only about 75 percent of the requests.

I am convinced that the response demonstrates a need for this important program and that it should be continued for 5 years as this legislation provides. Increasing the amount which may be loaned to any one student in any one year to $2,500 will make this comparable with the National Defense Education Act which seems clearly equitable.

APPENDIX

ASSOCIATION OF AMERICAN MEDICAL COLLEGES PROPOSALS FOR THE SUPPORT OF MEDICAL EDUCATION BY THE FEDERAL GOVERNMENT ADOPTED BY THE INSTITUTIONAL MEMBERSHIP, JANUARY 11, 1961, CHICAGO, ILL.

PREAMBLE

The American people are deeply concerned about health. Responding to this concern as a matter of national policy, the Federal Government in the past 15 years, largely through the Department of Health, Education, and Welfare, has joined State and local governments, health and educational institutions, voluntary health agencies, private philanthropy, and industry in meeting two especially critical needs in the attack on disease: the construction of hospital and other facilities for the care of patients (Hill-Burton program), and the support of medical research (National Institutes of Health).

Expenditures by the Government in support of these two programs represent investments in the health of the Nation which pay rich dividends, as has been amply documented. It is imperative that these programs be continued and developed further.

Health service facilities and medical research have made possible dramatic progress in the prevention and treatment of disease. A block to the effective use of new knowledge and to the pursuit of further knowledge is the increasing shortage of personnel in the health professions, particularly doctors. This block can be removed only by the improvement and expansion of the Nation's system of medical education.

The critical nature of this problem has been defined in five reports prepared in recent years by advisory groups of non-Government consultants.[1] These authoritative studies show that by 1975 the Nation will need to train about 50 percent more physicians than in 1960 just to maintain the current ratio of physicians to population, a ratio generally accepted as a minimum requirement.

Because of the time required to improve and develop facilities and faculties and to take doctors through the full cycle of 5 to 9 years of professional training action to improve and expand programs of medical education must be taken at once. Otherwise, the Nation faces a very serious reduction in its ability to control and cure disease and our people will not have available the medical service they want and expect.

Since the problem of medical manpower can be solved only by prompt and comprehensive national effort, it is appropriate that medical schools and their parent institutions outline the basic requirements which to them seem necessary to accomplish this national objective while preserving the traditional freedom of the educational institutions. To this end, the Association of American Medical Colleges is suggesting principles of a Federal program of assistance to medical education which have been generally agreed to by its members.

The program presented in this statement outlines those measures that the medical schools believe necessary if existing programs of medical education are to be maintained at an adequate level of quality and if there is to be a sufficient expansion of our facilities to provide the number of well-trained medical graduates that the Nation requires.

In considering needs of medical education, it is important to understand the variety, complexity, and interrelationships of activities involved in the training of medical personnel. This is especially true in relation to the three components of medical education: teaching, research, and service. The inseparable nature of these three functions has led to the "medical center" concept as a more realistic characterization of medical education than the too frequently held concept of the medical school, the teaching hospital, the research program, and community health services as activities independent of each other. However, the two major Federal support programs—for medical facilities and for medical research—while understandably directed toward specific restricted objectives have complicated the conduct of medical education by failing to recognize that research and service are integral functions with teaching. Thus the need for service facilities and the need for research facilities in a medical education environment have been considered independently by the Government, and no provision at all has been

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[1] 1952 report of the President's Commission on the Health Needs of the Nation; 1958 final report of the Secretary's Consultants on Medical Research and Education; 1959 report of the Surgeon General's Consultant Group on Medical Education; 1960 report of the Committee of Consultants, on Medical Research to the Subcommittee on Departments of Labor, Health, Education, and Welfare, of the Committee on Appropriations, U.S. Senate, 86th Cong., 2d sess.; 1960 report of the President's Commission on National Goals.

made for teaching facilities, although teaching is basic to both service and research.

The medical center typically has as its nucleus a medical school for the undergraduate training of candidates for the M.D. degree. Essential to this program is a strong faculty in the basic health sciences. Such scientists can be retained and can be fully effective only when they are given broad opportunity for research activity—teaching is barren in the absence of an environment conducive to the vigorous pursuit of new knowledge. These same faculty members are also called upon to train another important group of students—the future specialists in their fields who are Ph. D. candidates within the graduate program of the parent university. This is a vital function, particularly for the production of medical teachers and research personnel. Likewise, these faculty members in many situations are called upon to teach basic sciences to dental students, nursing students, and paramedical personnel. They must also participate in clinical teaching conferences in support of both undergraduate and graduate medical education.

The medical center concept is particularly pertinent in the teaching of the clinical specialties. Clinical teaching is conducted in relation to patient care, and a high standard of patient care is necessary for good teaching. A core of full-time teachers is required to give continuity and responsible direction and supervision to patient care and the related teaching. The teaching hospital of a medical school, then, whether directly operated by the school or affiliated with it, is an important component of the medical center. Also, opportunity for research is important to the clinical teacher and to good clinical teaching just as is true in the basic sciences.

The clinical faculty, in addition to its responsibility for teaching of M.D. candidates, is becoming increasingly responsible for graduate training of doctors—interns, residents, and fellows. Medical graduates are tending more and more to seek advanced clinical training in hospitals operated in conjunction with medical schools because of the educational orientation of the training. These teaching and training responsibilities put a heavy burden on the schools and their teaching hospitals for which support is required.

Finally, a new and growing responsibility of medical schools is to provide leadership in coordinating medical services within their area and in providing postgraduate and specialized training opportunities for practicing physicians.

These various activities of the medical school beyond the 4-year M.D. program must be understood and recognized—and support of medical education must be provided in keeping with the concept of the medical center.

The proposals that follow represent the initial steps that the Association of American Medical Colleges believe should be undertaken in order to accelerate the ability of this Nation's system of medical education to produce the numbers, categories, and quality of the professional and technical personnel required to meet the health needs of a population that is not only growing in size but also in medical understanding.

These proposals cover only the needs of the Nation's existing schools of medicine and the need for new schools. The Association of American Medical Colleges recognizes the importance of the health professional areas other than medicine and also of the research and research training that is done in institutions other than schools of medicine. Any provision which the Federal Government makes to meet the needs of educational and research activities that take place outside the medical school and its research and service facilities should be over and above the recommendations in this statement.

While all of the proposals require implementation, funds for construction are given first priority because it is the inadequacy of existing facilities that is the primary obstacle to the overall development that is needed. Until steps are taken to solve this problem, little will be accomplished by efforts to increase medical school faculties or student enrollments. Students and teachers must have suitable places in which to work, including classrooms, laboratories, libraries, hospitals, and clinics.

I. MATCHING FUNDS FOR MODERNIZATION AND EXPANSION OF EXISTING SCHOOLS AND THE CONSTRUCTION OF NEW SCHOOLS

A. The need

In the fall of 1959 the Surgeon General's Consultant Group on Medical Education reported that to maintain this Nation's present ratio of physicians to population, by 1975, 3,500 more physicians must be graduating each year than is pres-

ently the case. This means, with due allowance for dropouts between admission and graduation, that by 1970 this Nation must provide an increase of approximately 4,000 first-year places in its schools of medicine.

A survey in the fall of 1960[2] discloses that 1,700 of these additional first-year places can be created by the full modernization and expansion of existing schools. The remaiuing 2,300 must come from the establishment of new schools. Therefore, the provision of funds that will provide for both of these approaches will permit enrollment increases that can be both prompt and continuous. The Nation's schools of medicine, colleges and universities of themselves do not have the resources to finance the necessary modernization expansion and new development. Most of the needed money must come from the Federal Government.

B. Policy

Siuce medical education serves many national purposes and since its strength comes through the diversity of local ownership and control, the Association of American Medical Colleges favors both Federal and local participation in the construction of medical schools and their related research, library, hospital and clinic facilities.

Federal matching funds should be provided under conditions that will—

1. Be sufficient in amount to encourage action that is both prompt and adequate:
2. Encourage the modernization and expansion of existing schools;
3. Encourage academic institutions not presently involved in medical education to plan and develop new schools:
4. Encourage an institution's coutinuing effectiveuess in maintaining diversity in its sources of financial support;
5. Recognize the essential unity of medical education and research by identifying the support of one with the other;
6. Recognize the indispensability of the library, the university hospital, and clinic to medical research and educatiou.

C. Proposals

1. As an initial step, the Association of American Medical Colleges recommends that the Cougress pass enabling legislation covering a 10-year spand that will provide matching funds for the full modernization and expansion of existing programs in medical education and the development of new programs.

2. It is recommended that the first appropriation measure cover a 3-year period with a provision for annual amendment, depending upon the continuing study of needs and of the amounts that can be expeuded to the best possible advantage. As a basic appropriation for this 3-year period, the association recommends—

(*a*) That $50 million a year be appropriated for grants for the full modernization, expansion, or replacement of the educational, research, and library facilities of existing schools of medicine. If an increase of 5 percent or more is made for the enrollment of first-year medical students, the Federal matching should be $3 for $2;

(*b*) That $50 million a year be appropriated for grants to existing schools of medicine for the establishment, modernization, and expansion of those teaching hospitals and clinics that are their primary base for clinical teaching and research, the granting of such funds to be upon application made by the medical school or university. The matching formula for such grants should be one Federal for one local dollar;

(c) That for the first year, $50 million be appropriated for grants for the construction of new schools, including research facilities and teaching hospitals and clinics. Federal funds should be provided upon a 3-to-1 basis;

(*d*) That $300,000 per year be appropriated for grants, up to $50,000 to an academic institution that wishes to study the feasibility of establishing a new school.

II. FINANCIAL AID TO STUDENTS OF MEDICINE

In spite of a rapid increase in the number of liberal arts graduates, there continues to be a decline in the number of medical school applicants. While this may be due to a variety of reasons, there can be no doubt that one important reason is the amount of personal expense and time involved in study for the M.D. degree and in the additional years the young physician must spend in internship and residency training as contrasted with the time and cost involved in securing the Ph. D. in the various sciences.

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[2] Medical Education in the United States and Canada, Wiggins, W. S., Leymaster, G. R., Taylor, A. H., and Tipner, Anne, JAMA 174 : 1425–1431.

A nationwide study of the students graduating from medical schools in 1959 showed that at least one-third had important financial problems.

The Association of American Medical Colleges believes that to insure an adequate number of medical students, the most crucial need at this time is for nonrefundable educational grants (predoctoral medical fellowships). The association recommends that these grants be provided in amounts and under conditions that will attract and hold qualified students who for financial reasons might not otherwise be able to pursue a career in medicine. The association recommends that these nonrefundable fellowships should—

1. Be available for students during all 4 years of medical school;
2. Not in any way limit the ability of a student to attend the school of his choice;
3. Not impose restrictions upon the student's freedom to obtain postgraduate training or pursue a career of his choice;
4. Be made available as a lump-sum grant to each school, the amount to be determined by the number of enrolled medical students. Five hundred dollars per student is suggested;
5. Be administered by each school in accordance with its particular needs and circumstances with the provision that all such funds be used in direct aid to medical students, that up to $2,500 per student be the maximum of the Federal fellowship allowed in a single school year, and that no restrictions be placed upon the freedom of the school to use funds for student aid from other sources.

III. THE PROVISION OF THE FULL COST OF PROJECT-SUPPORTED RESEARCH AND RESEARCH TRAINING

The association continues to recommend that grants from the National Institues of Health for the support of research and research training permit the payments of full costs based upon a formula that will allow for variations in the costs from institution to institution.

IV. THE SUPPORT OF RESEARCH AND RESEARCH TRAINING

The Association of American Medical Colleges recognizes that the Federal support of research and research training has lead to great improvement in the health of both the Nation and of the world and recommends that this support be continued. One of the major objectives of the association's proposals for funds for the remodeling and expansion of existing schools and for the construction of new schools, as well as its recommendations for full reimbursement for the cost of research and research training, is to strengthen the basic capacity of the Nation's schools of medicine to conduct these activities.

The association therefore recommends that, as the result of constant study, each year's appropriation for research and research training continue to be adjusted to the national need, to the availability of facilities and scientific personnel, and to the amounts of money that can be spent wisely and efficiently.

V. GENERAL SUPPORT OF MEDICAL EDUCATION

The program of assistance to medical education offered in the foregoing sections is essential to modernize and expand the physical facilities of the medical schools of the Nation, to assist in the creation of new schools, and to make it possible for young men and women of intelligence and character, even though of modest means, to secure a medical education.

But this program alone will not provide enough physicians to meet the needs of the Nation. A strong system of medical education requires adequate financial support that is continuing and stable. Universities with budgets already under great stress will be unable to maintain, improve, or expand their existing medical programs or to establish new medical schools or new educational programs unless sources of additional operating funds are found.

Since this is a matter of vital concern to the entire Nation, the Association of American Medical Colleges believes it is reasonable and proper that the Federal Government should provide together with other national and local sources the needed additional operating funds. All such funds should be made available in a manner which will assure the continuation of full institutional control of medical education.

VI. ADMINISTRATION

The Association of American Medical Colleges believes that the close coordination of Federal programs that support medical education is essential.

The association takes cognizance of the long and effective working relationships existing between the medical colleges and the Department of Health, Education, and Welfare, particularly the U.S. Public Health Service and its National Institutes of Health and expresses its hope that the future Federal support of medical education will be administered in the same enlightened manner, with the full utilization of non-Federal consultants, that has characterized the past.

The CHAIRMAN. Dr. Berson.

Dr. BERSON. Thank you, Mr. Chairman.

I have prepared a statement which I turned over to the clerk. I would like for it to be included in the record and then make some very brief comments about it.

The CHAIRMAN. It will be inserted in the record together with the table that I observe that you have submitted with it.

(The prepared statement of Dr. Robert Berson follows:)

STATEMENT ON BEHALF OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES

I am Dr. Robert Berson, executive director of the Association of American Medical Colleges. Until December 31 of last year, I was dean of the South Texas Medical School of the University of Texas in San Antonio, and had the privilege of serving as president of the association.

It is an honor and a pleasure to testify before your committee, whose chairman and members have already done so much to advance the health of the people of this Nation. It would be difficult to exaggerate the importance of your contribution in recommending the passage of the Health Professions Educational Assistance Amendments of 1963, which is now Public Law 88–129. This represented a long step toward providing for the future health of this Nation, and you are now considering legislation which will take additional and badly needed steps in this direction.

I would like to make a few comments on the physician-to-population ratio and the demand for health care and then address myself to parts of this legislation that will authorize grants to assist schools of medicine, dentistry, and osteopathy to improve the quality of their education programs and to provide scholarship grants to their students.

SUPPLY OF PHYSICIANS

In 1959 a group of consultants on medical education reported to the Surgeon General of the U.S. Public Health Service. They took the position that the minimal objective should be expanding the enrollment of medical schools enough to maintain the physician-to-population ratio at the level it has been for the last two decades, and they indicated clearly that it would take a 50-percent increase in the number of physicians graduating from our medical schools each year to accomplish this minimal objective by 1975. At the time the consultants published their report, their estimates of the physican-to-population ratios were generally accepted by most of those who were knowledgeable in the field. Since then, several years have passed and there have been further discussions of this whole matter.

In 1964, after a conference called by the Health Resources Advisory Committee, it was decided to include foreign-trained interns and residents, plus physicians with temporary foreign addresses and others whose addresses are temporarily not known, in the calculation of the total number of physicians. The population groups to be included were also further defined.

If these new definitions are applied to the figures used by the Surgeon General's consultants, the physician-to-population ratios they reported are changed. For 1950, the ratio becomes 149 instead of 144 per 100,000; for 1955, it becomes 150; for 1960, it becomes 148; and for 1963, it becomes 149.3. In my opinion, the ratio for 1965 will be 150 per 100,000.

The consultants were not optimistic that the physician-to-population ratio would be maintained even as long as 1965, so these recalculated figures are somewhat encouraging. It should be emphasized, however, that these figures include graduates of foreign medical schools, whether they are serving as interns or residents or have obtained licenses and settled permanently in this country. In the last few years, there has been an unexpected and substantial increase in the number of such foreign medical graduates coming to this country each year. The Association of American Medical Colleges is convinced that our attention should be focused on the number of students enrolled in and graduating from our own medical schools each year. This country should not be dependent for its medical care upon a substantial flow of medical graduates from countries which need them far worse than we do.

There are two other important factors which limit the usefulness of the physician to population ratio. The first is that it reveals nothing of the geographic distribution of physicians and nothing of the distribution of physicians as between family practice and the many types of specialization. Nor does it reveal anything about the numbers and distribution of individuals trained in the allied health professions. The second important factor is that this simple ratio reveals nothing about the demand for health care.

DEMAND FOR HEALTH CARE

In a recent report,[1] Dr. Lowell Coggeshall summarized some trends of great importance:

"(v) *Scientific advance*

"In the past half century, advances in scientific knowledge have had growing influence on health care and continue to be the most powerful force in changing the style of medical practice. As a consequence of these changes in practice, the effectiveness and efficiency of health care has exceeded the dreams of a few decades ago.

"The use of antibiotics to control communicable diseases presents one of the most striking examples of the results of scientific advance. The modern physician, with limited amounts of penicillin, can accomplish more with a pneumonia patient than could the doctor of two decades ago who devoted many weeks of constant care to his patient. No amount of attention insured recovery in the past. Today, the risk has been substantially eliminated and the duration of care needed for the pneumonia patient reduced to a few days.

"Increasing power to manipulate the material events in living systems conjures up potential applications to medical practice that may far exceed the influence of today's applicable knowledge. For example, recent major discoveries in human genetics conceivably may eventually yield important leads in the prevention of some kinds of mental retardation.

"Scientific advances already realized have led to the virtual elimination or control of health hazards that have impaired and shortened the lives of men throughout human history. Similarly, it is now possible to do more to prevent disease. This has engendered growth of environmental medicine and preventive medicine as important fields of health care.

"New approaches and kinds of care—such as cardiac surgery—never envisioned by even the most skilled practitioners of a century ago are accepted as commonplace today. New fields of diagnosis and care—including those related to emotional problems—see advances each year.

"And, as the people of America know more about scientific advances and about what can be done in the field of medicine, their expectations increase. Every scientific breakthrough is widely publicized. Human expectations rise. Demands for the application of new knowledge to the solution of health problems are presented. Scientists, medical educators, and individual practitioners are expected to provide the followthrough that science has made possible.

"The aggregate result of scientific advance is twofold—medicine's ability to provide more and better health care, and society's expectation that these improvements will be made available promptly to the individual.

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[1] "Planning for Medical Progress Through Education," Lowell T. Coggeshall, M.D., AAMC, Evanston, Ill., April 1965.

"(2) *Population change*

"Outside the field of health care—but certainly closely related to it—is another observable trend that has the most profound implications for medical education: the population of America is growing and changing in composition and distribution.

"The population of the United States has increased from 76 million in 1900 to 181 million in 1960, and an estimated 195 million in 1965. By 1970, there will be at least 208 million Americans. By the end of the century, the Nation's population may total 300 million or more.

"Equally significantly, the American population is showing an increasing proportion in upper age groups. In 1940, about 6.5 percent of the population was 65 years of age or older. In 1950, this group had increased to 8.1 percent of the population. The 1960 census showed 8.7 percent of the American people to be 65 years of age or older. By 1970, the percentage is expected to increase to nearly 10 percent and by the year 2000 to over 10 percent.

"America's population has also been shifting westward geographically and from rural to urban areas. Western States, such as California and Texas, have experienced phenomenal rates of growth at the same time that the Nation as a whole has been transformed from a predominantly rural to a largely urban nation. In 1900, only 40 percent of the American people lived in urban areas. In 1960, about 70 percent lived in urban areas.

"The absolute increase in the number of people leads directly to an increase in the need for health care. However, in recent decades, the growth in the need and effective demand for health care has grown more rapidly than the absolute increase in the population. This has been the result of changes in the composition and distribution of the population.

"As the proportion of the population in the 65 and older category has increased, the need for health care has increased. Data show clearly that persons over 60 require health care more frequently and for longer periods of time than do younger persons. Disease tends to be more chronic and less responsive to treatment. Extending the lifespan implies that each person will have to have health care a larger number of times during his lifetime than was true earlier. Clearly, growth in the proportion of America's population in upper age ranges will cause a disproportionate increase in the need for and use of health services.

"Urban living tends to change attitudes and add to the sophistication of people in their use of health services. Reliance on the department store rather than the country store undoubtedly encourages people to accept and turn to medical groups, clinics, and hospitals as sources for health care more readily than would be true in rural areas. Knowing that specialists are available and that they can provide more precise care encourages the use of specialists rather than physicians in general practice or even family practice.

"The mobility and access of urban dwellers to health services also makes it possible for them to seek health services more frequently and sooner than can the farm resident who must travel many miles to receive uncertain care.

"These factors related to population change not only cause an increase in the number of individuals seeking health care, but also have psychological effects that influence health expectations—especially those of the city dweller.

"(3) *Increasing individual health expectations*

"Advances in science and in health care have stimulated the health expectations of individuals. Moreover, people today are being taught to expect good health care. Throughout history, man has tended to accept illness, plagues, and personal injuries as normal. Only in the present century have men begun to find that most health hazards can be eliminated, controlled, or subjected to amelioration. With this knowledge has come the expectation that health care will be made available. Today, few are willing to suffer needlessly.

"Commonly available education has increased the individual's awareness of health and the care that can be obtained. Schools, communication media, insurance companies, through institutional advertising, organized youth and adult groups, health and welfare organizations, employers, unions, and many others have made the public increasingly aware of health considerations generally and the symptoms of and care available for specific maladies. Prepaid medical care plans have encouraged the use of physicians' services and hospitals.

"Radio and television, as well as periodicals, have given the average housewife and members of her family a relatively sophisticated awareness of common—and less common—diseases and their treatment. The work of physicians and the functioning of hospitals are becoming increasingly commonplace knowledge. The

general awareness of the existence of elaborate diagnosis and therapy equipment has led the average person to expect it to be available in his community.

"The average citizen who finds that his own community does not have the health care facilities that television has led him to expect is disappointed and is willing to go elsewhere, if necessary, to have the best and the latest forms of care. Virtually every hospital confronted with such expectations finds it necessary to have its own "cobalt bomb" and other types of expensive, specialized equipment.

"Growing awareness of health has also increased the demand for preventive care and diagnosis. The annual physical examination and the complete 'checkup' are sought with growing frequency by an increasing proportion of the population.

"Changing expectations can certainly be expected to have a continuing and profound effect on the way in which health care is provided, as well as on the kinds and amounts of care that will be sought by America's increasing population.

"(4) *Increasing effective demand for health care*

"Not only do the people of America have increasing health care expectations, they are increasingly able to pay for the care they want and need * * *. While 'need' for health care cannot presently be determined in any objective, quantitative sense, it is clear that the effective demand for health care is increasing and can be expected to continue to grow.

"In part, demand is growing because there are more people in the Nation, the growing numbers in the older age category require more care, and persons of all ages expect more care because they are better aware of their needs and the care that is available and their ability to purchase health care has been augmented and assured.

"Basically, people are better able each year to perceive the value of health care. They are increasingly willing to pay for the care they want. Higher family incomes and more disposable income per capita increases their basic ability to pay for health care. As incomes rise, they are better able to devote a larger proportion of their total incomes to health care * * * since they are able to meet minimum essential living costs for housing, food, and clothing with a smaller percentage of their incomes.

"Perhaps most important of all in increasing the effective demand for health services during the past two decades has been the phenomenal rise in health insurance and a myriad of third-party payment plans designed to cover part or all the cost of physicians' services and hospital care in time of illness. It is estimated that at least 75 percent of the people in America today are covered by some form of health insurance. More than 1,800 organizations operating in every State of the Nation provide health insurance coverages.

"(9) *Need for increasing numbers of physicians*

"A continuing trend is the growing need for physicians. In centuries past, the physician's concern was with life and death. Now, with increased capabilities, he is concerned more and more with care in illness and preventive care. The consequence of this development, as well as the many others cited earlier, is a growing need for physicians.

"The recently published report of the President's Commission on Heart Disease, Cancer, and Stroke, in commenting on the resources America has to provide needed health services, emphasizes that 'the first hard fact to be faced is that there is not enough health manpower to meet the needs of the American people. There are not enough doctors and not enough supporting people.' It goes on to note that 'the physician supply is beyond question the most critical single element in manpower for health service.'

"Virtually all persons directly responsible for or indirectly associated with providing medical service, and persons representing consuming groups, are well aware of the need for practicing physicians in the decades ahead. Although medical schools have increased their capacities to educate physicians, the increase in the supply is not keeping up with the needs, nor are methods for increasing the productivity of physicians yet developed sufficiently or effectively enough to close the gap.

"There is every indication that the future will see more health care demanded and provided than ever before. In light of the growing need for physicians, despite the hopeful offsetting factors, it is clear that more physicians must be trained as quickly as possible, and that the result of an increased number of physicians will be 'healthy,' not only for the health needs of the Nation but the profession itself."

Up to this time the operation of health professional schools in this country has been supported by alumni, individual donors, universities, foundations, corporations, and local and State governments. With this broadly based support, medical schools have made a more strenuous effort to respond to the quantitative needs of society than most people realize.

From 1957 through 1963 the number of medical students enrolled increased 9 percent, the number of fellows 61 percent, and the number of graduate students 300 percent, while in the affiliated hospitals, the number of interns increase 63 percent and the number of residents 86 percent. Also the number of students in the fields allied to medicine, for which the medical schools had some responsibility, increased 255 percent.

During this period of an overall increase of enrollments of 126 percent, the funds to support the basic operation of the schools increased only 74 percent.

GRANTS TO IMPROVE THE QUALITY OF SCHOOLS OF MEDICINE, DENTISTRY, AND OSTEOPATHY

The association is convinced that the time has come for the Federal Government to join the other sectors of our society in providing basic support for education in the health professions. Such additional support is literally necessary if we are to make greater progress at meeting the needs and demands of the people of this country for more and better medical care.

The precedent for Federal support of institutions serving a clear and pressing need of the people of this country was established long ago in relation to land grant colleges.

Every medical school serves in part as a national institution. Its graduates spread out to all parts of the country and serve the total range of needs for medical care. It is worthy of some emphasis that accomplishing the missions of the Department of Defense, the Public Health Service, and the Veterans' Administration now requires the annual intake of about 3,900 physicians, or more than half as many as graduate from all the medical schools. They serve for an average of about 4 years, and about 22,000, or 12 percent of all the physicians in the country, are on full-time duty with these three agencies.

The medical schools of this country vary enormously, not only in age and location but also in strength and stability. At one end of the spectrum are a small number of schools so weak and poorly financed that it is doubtful they can continue to provide acceptable education without more institutional support. The grants proposed in this legislation will be enormously helpful to them. At the other end of the spectrum are 15 or 20 very fine, well established institutions with large and complex programs. The grants proposed will be modest in relation to their total expenditures, but they will make it possible for these fine institutions to continue to pioneer in the development of programs in which newly developed knowledge offers great promise. In the middle are the majority of schools with hardly enough money to keep their present programs going and under great pressure to correct their known weaknesses, institute programs of proven value and expand enrollments. The grants proposed will be of great help toward doing some or all of those things.

SCHOLARSHIP GRANTS FOR SCHOOLS OF MEDICINE, OSTEOPATHY, OR DENTISTRY

The scholarship program provided by this legislation is needed so that some young people from families of medium or low incomes can have an opportunity to enter the health professions. The characteristics desirable in a physician—intelligence, compassion, sustained interest, skill in dealing with people, and capacity for hard work—are distributed broadly among our people, with no particular relation to family income. On the other hand, disease, disability, and premature death are distributed unevenly, with heavy concentration among the poor and the very old. If some gifted individuals who have grown up in less fortunate families can become physicians, they may be particularly helpful in dealing with these medical problems.

This is a modest proposal that will provide scholarships for about 10 percent of the students with the limitation that no student will receive more than $2,500 per year. From the student's standpoint, the average cost of attending medical school is about $3,700 per year for single students. In 1963, 81 percent of the graduate students in the "life sciences" received nonrefundable grants which averaged $2,700, or more than the maximum provided in this legislation.

The committee may be interested in knowing that only 67 percent of the physicians in this country are engaged in private practice, and by no means all of them fit into the popular image of having a full practice of patients willing and able to pay full fees. Quite a number of physicians in practice serve patients whose ability to pay is limited indeed and 37 percent of all physicians are in a wide variety of public service positions.

We believe this legislation makes sound provisions for administering these scholarships. It is particularly important that they do not place any restrictions on the students' freedom to attend the school of his choice, obtain training after graduation, or pursue the career of his choice.

Mr. Chairman, in closing, I want to emphasize that as necessary as all parts of this legislation are, perhaps the greatest importance will be realized if other sectors of our society are stimulated to provide increased support so the rising tide of demand and need for health care will be met. The construction grants and loan funds require matching with non-Federal funds. I am confident the medical schools will try to meet the needs for more physicians, but the quality of their educational programs would surely decline if they expanded much more rapidly than the total support of their basic operations.

Increases in medical and graduate students, interns, and residents and other students and expenditures for basic operations, 1956–57 to 1962–63—Students for whom medical faculties have total or substantial responsibility

	1956–57 [1]	1962–63 [2]	Percent increase
Medical students	28,852	31,491	9.1
Graduate students	2,552	4,105	60.8
Fellows	1,163	4,649	299.7
Interns	2,537	4,134	62.9
Residents	7,267	13,539	86.3
Other	29,719	105,427	254.7
Total	72,090	163,345	126.6
Expenditures for basic operations	[3] 146,415,313	[4] 256,095,643	74.9

[1] JAMA, vol. 165, No. 11, p. 1417.
[2] JAMA, vol. 186, No. 7, p. 701.
[3] JAMA, vol. 168, No. 11, p. 1494;
[4] JAMA, vol. 190, No. 7, p. 616.

TABLE 1.[1]—*Ratio of foreign-trained licentiates to the total licentiates representing additions to the medical profession in the United States, 1950–63*

Year	Total new medical licentiates	New United States- and Canadian-trained licentiates	New foreign-trained medical licentiates	Percent of new medical licentiates attributable to foreign-trained M.D.'s
1950	6,002	5,694	308	5.1
1951	6,273	5,823	450	7.2
1952	6,885	6,316	569	8.3
1953	7,276	6,591	685	9.4
1954	7,917	7,145	772	9.8
1955	7,737	6,830	907	11.7
1956	7,463	6,611	852	11.4
1957	7,455	6,441	1,014	13.6
1958	7,809	6,643	1,166	14.9
1959	8,269	6,643	1,626	19.7
1960	8,030	6,611	1,419	17.7
1961	8,023	6,443	1,580	19.7
1962	8,005	6,648	1,357	17.0
1963	8,283	6,832	1,451	17.5
Total	105,427	91,271	14,156	13.4

[1] Source: State Board Number, JAMA, 188: pp. 883 and 892, (June 8) 1964.

TABLE 2.[1]—*Ratio of foreign-trained physicians filling internships and residencies to total internships and residencies filled in the United States, 1950–63*

Year	Internships filled			Residencies filled		
	Total	By foreign-trained M.D.'s	Percent by foreign-trained M.D.'s	Total	By foreign-trained M.D.'s	Percent by foreign-trained M.D.'s
1950	7,030	722	10.3	14,495	1,350	9.3
1951	7,866	1,116	14.2	15,851	2,233	14.1
1952	7,645	1,353	17.7	16,867	3,035	18.0
1953	8,275	1,787	21.6	18,619	3,802	20.4
1954	9,066	1,761	19.4	20,494	3,275	16.0
1955	9,603	1,859	19.4	21,425	4,174	19.5
1956	9,893	1,988	20.1	23,012	4,753	20.6
1957	10,198	2,079	20.4	24,976	5,543	22.2
1958	10,352	2,315	22.4	26,758	6,042	22.6
1959	10,253	2,545	24.8	27,590	6,912	25.0
1960	9,115	1,753	19.2	28,447	8,182	28.8
1961	8,173	1,273	15.6	29,637	7,723	26.0
1962	8,805	1,669	19.0	29,239	7,062	24.2
1963	9,636	2,566	26.6	29,485	7,052	23.9
Total	125,910	24,786	19.7	326,895	71,138	21.8

[1] Source: AMA Directory of Internships and Residencies, 1964.

Dr. BERSON. Then I would like to emphasize a few of these points verbally and then, of course, we will be glad to try to answer any questions.

You will recall that when the legislation that this act would extend, which is now Public Law 88–129, was under consideration there was a good bit of discussion of physician-population ratios and their projections for the future.

I have included in my statement a very brief summary of this, and one of the main points I want to emphasize is that the physician to population ratio which sounds simple and helpful is only partially helpful because it really does not say anything about the distribution of physicians, geographically or by specialty, what they are doing, and it does not say anything about the vast number of people in the allied health professions who are also working on the problems of patients.

It is a fact that in the last few years since 1959 to 1965 the physician to population ratio has remained about the same. This is a little more encouraging than the group of consultants to the Surgeon General anticipated, but a prominent feature of this is that it includes the influx of foreign medical graduates, and I think it is a very striking phenomenon that has developed in the last few years.

I have included as the last part of my statement a table which shows that there are now about 2,500 foreign medical graduates serving as interns in this country and not all of the internships are filled. There are also about 7,000 foreign medical graduates serving as resident physicians and not all of the residencies are filled.

The CHAIRMAN. When you mention a foreign medical graduate do you mean a student from a foreign country who has graduated from one of our medical schools?

Dr. BERSON. No, sir.

The CHAIRMAN. Or graduated from or come from a foreign medical school?

Dr. BERSON. I mean the students who have graduated from a medical school in a foreign country. A small percent of those students are

U.S. citizens who have gone there for that purpose, but the vast majority of them are citizens of that country who have gone to medical schools there and then have come to this country.

The CHAIRMAN. What is the latest year you have on that, 1963?

Dr. BERSON. The latest year shown in this table is 1963.

The CHAIRMAN. And you show that how many come from foreign countries?

Dr. BERSON. 2,566 as interns.

The CHAIRMAN. 2,566.

Dr. BERSON. This is in table 2.

The CHAIRMAN. Yes.

Dr. BERSON. Yes, sir.

The CHAIRMAN. Where is that? What table?

Dr. BERSON. The last page labeled table 2.

The CHAIRMAN. I see it. In other words, 2,566 out of a total of 9,636——

Dr. BERSON (continuing). Interns were graduates of foreign medical schools.

The CHAIRMAN. And residencies filled, that is a total from 1950 to 1963.

Dr. BERSON. Yes, sir.

The CHAIRMAN. In other words, almost 25 percent.

Dr. BERSON. That is right.

The CHAIRMAN. Of our medical personnel manpower are coming from foreign-trained institutions.

Dr. BERSON. In these particular capacities, that is of intern and that of resident. Now, many of these physicians return to the country of their orgin.

In table 1 there is a list tabulation of those who have obtained licenses in this country and presumably mostly all of them remain here permanently.

The CHAIRMAN. I am glad you included that, Doctor, and I think it is very important information.

Dr. BERSON. Our association is convinced that we should be concerned with the admissions to and the graduations from our own medical schools. This is what we can do something about and we feel that it would be desirable if we were able to educate enough physicians to be able to export them rather than to have to import them.

I have included in this testimony a good bit of quotation from a report prepared by Dr. Lowell Coggeshall which I think is very important and very helpful, but I do not believe it would be worth while to take the time by reading more than a little part of it.

Over on page 8 he said:

> A continuing trend is the growing need for physicians. In centuries past, the physician's concern was with life and death. Now, with increased capabilities, he is concerned more and more with care in illness and preventive care. The consequence of this development, as well as the many others cited earlier, is a growing need for physicians.

The next point I would like to emphasize is that up until this time the operation of the schools in the health professions has been supported by tuition, alumni, individual donors, universities, foundations, corporations, and local and State governments. With this broadly based support, medical schools have made a more strenuous effort to respond to the quantitative needs of society than most people realiz

From 1957 through 1963 the number of medical students enrolled increased 9 percent, the number of fellows 61 percent, and the number of graduate students 300 percent, while in the affiliated hospitals, the number of interns increased 63 percent and the number of residents 86 percent.

During this period of an overall increase of enrollments of 126 percent, the funds to support the basic operation of the schools increased only 74 percent.

Our association is convinced that the time has come when it is very important for the Federal Government to join these other sectors of our society in forthright support of medical education. The institutions and Federal agencies have been partners in research for quite a long time, a very successful partnership, but these Federal funds are restricted to research, and we think that it is desirable for Federal funds to be available in a forthright manner to support the educational program as this bill will provide.

The grants to improve the quality of schools of medicine, dentistry, and osteopathy really will be tremendously helpful. It may not be always realized, but there are some medical schools in this country at any given time, 10 to 15, who are in very serious financial difficulty. They barely have enough money to keep going, and the strain is so great that their concern is as to whether they can continue or not. For institutions in this category the sort of institutional grants provided in this legislation will really be a lifesaver.

At the other end of the spectrum we are fortunate in having 15 or 20 medical schools that are very well established and very sophisticated and fine institutions. Institutional grants to those strong schools will be rather small compared to what they are already spending, but those are the schools who can pioneer in developing new programs where new knowledge makes it sensible and which pioneering can then be helpful to all schools.

The majority of medical schools are in between these extremes. They are finding it nip and tuck to have enough money to operate. This sort of grant can help them correct deficiencies that may exist and build strengths where they know they need it and can greatly help them meet the need to expand all of their activity.

I consider this the most important part of this legislation.

The scholarship program that is provided is in my opinion needed so that some young people from families of low or medium income can enter these health professions. The characteristics desirable in a physician are distributed broadly among our people with no particular relation to family income. On the other hand, disease, disability and premature death are distributed unevenly with heavy concentrations among the poor and the very old. We think that if some gifted individuals who have grown up in less fortunate families can enter the health professions they can be particularly helpful in dealing with and understanding some of these stubborn medical problems that we have.

The medical schools had an interesting experience after World War II, because we had a large wave of students who were benefiting from the GI bill of rights and men who had previously not thought of studying medicine found that they could, and they entered medical schools and most medical educators found that generation of medical

students some of the most promising and satisfactory people we have seen going through medical school. So we are confident that this rather modest program that would provide scholarships for up to about 10 percent of students will be of tremendous benefit.

So, in closing, I would like to say that we think that this is fundamentally important legislation and we hope that you will recommend it and it will pass at an early date.

We would be delighted to supply any information or to try to answer any questions.

The CHAIRMAN. Doctor, we thank you very much. We thank both you and Dr. Howard for your statement.

May I just ask this one question?

Dr. Howard, you said that to implement the program the applications on file for the Federal grants totaling $209 million toward construction.

Dr. HOWARD. Yes, sir.

The CHAIRMAN. There would be a total outlay or cost of $584 million which is, of course, $285 million that would come from other sources. Is it your judgment that this would provide us with the needs of medical institutions; in other words, if this amount of funds were to be made available insofar as you can see at this moment, would that be sufficient?

Dr. HOWARD. As I indicated in here there are on file, there have been made applications or letters of intent indicating some $400 million total requests on the part of "medical schools." I emphasize medical schools there because this is just the medical school part of this act, and as you know it covers some other health sciences as well, so this is medical schools. My own feeling is that even this amount is just a part of it, perhaps no more than half.

I know of a good many schools that have not even come to the point where they have filed a letter of intent, our own being one of them. As far as we can see right now, this figure which is now at the $400 million mark for medical schools is probably appropriately closer to $800 million.

The CHAIRMAN. We do not want to start in connection with this program dealing in speculations. I think if we can get this record down to a concrete and specific need we probably will be able to meet the requirements. So I would suggest that we try to make this record on the basis of what the facts are and not what somebody might think they might be in the future. In other words, I find that in dealing with these programs we get along a lot better if we proceed on the basis of what we know is required and needed. If you feel that, insofar as we can see now, that something like what you have suggested will meet the needs of the medical institutions that is one thing.

Dr. HOWARD. Yes, sir.

The CHAIRMAN. We have requested the Department to file with us the breakdown of what they feel would be necesary to meet the need on an annual basis beginning with the 1967 fiscal year. I would invite your attention to that request and maybe you would like to cooperate with it.

Dr. HARRIS. Fine.

The CHAIRMAN. Are there any questions? Any further questions by members of the committee?

Doctors, thank you very much. We appreciate your interest and your statements and glad to have your testimony.

Dr. HOWARD. Thank you for the opportunity.

Dr. BERSON. Thank you, sir.

The CHAIRMAN. I am particularly pleased and honored personally as well as chairman of this committee to welcome to these hearings Dr. David W. Mullins, president of one of the greatest institutions in the United States, the University of Arkansas. I hope you do not mind me saying that, my colleagues. If I cannot utilize this opportunity for my own State I have no business being here.

But, seriously, we do feel that the University of Arkansas has one of the greatest medical center complexes in the United States. That is not braggadocio. I say to my colleagues that is an actual fact.

Dr. Mullins, we are glad to welcome you here as one of the outstanding educators of our Nation expressing to the committee your views on this subject matter.

I notice you have with you a longtime friend, a vice president of the University of Arkansas in charge of the medical programs, Mr. Storm Whaley, who gained a great deal of experience here in Washington as administrative assistant to one of our colleagues and, therefore, he is somewhat familiar with Capitol Hill and surroundings, and so forth. Perhaps that is the reason you brought him with you. I do not know.

But, Storm, we are glad to have you, and if you would like to take a seat with Dr. Mullins at the table we would be very glad to have you do so.

STATEMENT OF DR. DAVID W. MULLINS, PRESIDENT, THE UNIVERSITY OF ARKANSAS; ACCOMPANIED BY STORM WHALEY, VICE PRESIDENT FOR HEALTH SCIENCES, UNIVERSITY OF ARKANSAS

Dr. MULLINS. Mr. Chairman and members of the committee, I am delighted, indeed, to have the opportunity of meeting with the committee today and discussing this important piece of legislation, and I am delighted also that Mr. Whaley can join me here because if you have questions on detailed matters he may be in better position to respond that I.

I have prepared for the committee some testimony which I should like to have included in the record.

The CHAIRMAN. It may be included, Dr. Mullins.

(The prepared statement of Dr. David W. Mullins follows:)

TESTIMONY ON BEHALF OF THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES & LAND-GRANT COLLEGES, BY DAVID W. MULLINS, PRESIDENT, THE UNIVERSITY OF ARKANSAS

I am David W. Mullins, president of the University of Arkansas. I am here today to present testimony in support of H.R. 3141, the Health Professions Educational Assistance Amendments of 1965, on behalf of the National Association of State Universities & Land-Grant Colleges.

Our association is composed of 97 State universities and land-grant institutions, with at least one located in each State and Puerto Rico. These institutions enrolled almost 1½ million students this last year, granted a third of all baccalaureate degrees, and about three-fifths of all doctorial degrees awarded in the United States—38 of the 94 medical schools now granting M.D. degrees are lo-

cated at these institutions. In addition, seven of the nine new medical schools now in various stages of establishment are at member institutions of our association. Also all three of the 2-year medical schools in this country. In 1961–62, these institutions awarded 42 percent of all the first-level professional degrees (including M.D.'s), 59 percent of all second level, and 74 percent of all doctorates in the health professions in the country.

Although our association supports each of the four major provisions of H.R. 3141, we are particularly enthusiastic about part E, which provides for grants to improve the educational quality of schools of medicine, dentistry, and osteopathy. Our enthusiasm stems from the fact that it incorporates a principle in which we believe strongly—that to preserve the basic and unique ability of the college and universities of the country to help in the achievement of national aims and objectives, there is a need for significant programs of broad, flexible institutional grants to supplement the special-purpose grants carried out through the project system.

At the present time, Federal funds directly or indirectly support, in varying degrees, most of the components fundamental to the medical schools' missions, including especially research and research training and the clinical training of residents. In addition, Federal aid has been made available for the construction of both research and teaching facilities at medical schools and for the support of patient care in clinical research centers. Some funds are provided for professional training directly in a few limited programs and indirectly through other programs.

In the years since World War II, the medical schools have come to rely so heavily on these funds that their withdrawal would cause disastrous consequences at most medical schools and would probably prove fatal to some. Twenty years ago, Federal funds accounted for no more than one-tenth of medical school income. Ten years ago, this has grown to around 25 percent. Today, Federal funds represent well over half the total income of the medical schools in the country, exclusive of aid for the construction of buildings. The present size and nature of the tax load, the heavy concentration of taxing ability vested in the Federal Government, and the pressures of the unprecedented undergraduate enrollments with which the colleges and universities are now struggling make it unlikely that individual or corporate giving, State or local taxes, student tuition, or other sources could be considered, even under the most favorable conditions, as a substitute for this support.

I stress this dependence of the medical schools on Federal support for two reasons:

In the first place, I want to emphasize the importance of these funds. The national competence to deal constructively and actively with its health problems and the ability of the medical schools of the country to contribute to that competence is clearly attributable, in large measure, to the support that has been authorized by the Congress of the United States. For the members of this committee in particular, and to the Members of Congress in general, this should be a solid source of justifiable pride. Nothing, of course, is more basic to the welfare of a country than the health of its citizens.

In the second place, I stress this dependence to emphasize that the activities carried out through this support are not incidental or supplementary to the basic functions of the medical schools, but are fundamentally vital to their discharge. It is not enough to say that this support is beneficial to the medical schools, just as it is not enough to say that food is beneficial to a human being. The dependence is fundamental, vital.

But as we all know, beyond the basic subsistence level, foods vary greatly in their effect upon the health and vigor of the body. So also do forms of Federal assistance to the colleges and universities of the country. Even though the activities carried out through Federal support at medical schools are not incidental or supplementary to the basic functions of the institutions, the mechanism by which most of this support is channeled to the institutions is best suited to provide assistance for exactly these types of activities—the incidental and the supplementary. Special-purpose, limited-term grants, in and of themselves, are not well designed to strengthen the ability of institutions to carry out fundamental functions.

The National Association of State Universities and Land-Grant Colleges has long recognized this truth. When the enabling legislation for the National Science Foundation was being considered in the Congress in the late 1940's, we vigorously supported a plan for distributing some—perhaps as much as 25 percent—of the

funds made available to the Foundation in the form of institutional grants, as opposed to grants to individuals at institutions.

Experience with the project-grant system has been such that others have come to agree with us on this important matter. In 1960, the American Assembly concluded, in the Federal Government and Higher Education, that special-purpose, limited-term grants "are covered and executed without aid to higher education being even a secondary purpose. They are primarily a device for a Federal department securing personnel, information or service * * *. Because Federal money is available only for such specialized purposes, it has affected the very nature of higher education, altered markedly the teaching emphasis, given colleges new directions and responsibilities, and obviously rearranged their financial structure * * *. Because the money comes from so many diverse Federal sources, each one initiated and executed without relationship to the others, none of them responsible for their total effect upon the Nation's colleges and universities, higher education as a whole may be weakened in its ability to do its prime jobs."

More recently, the same idea has been expressed by Dr. James A. Shannon, Director of the National Institutes of Health, the report of the President's Study Committee on the National Institutes of Health, headed by Dr. Dean E. Wooldridge (Biomedical Science and its Administration) and others. Just a few weeks ago, Dr. Frederick Seitz, President of the National Academy of Sciences, pointed out that the project system, despite the fact that it has been "enormously beneficial," has "imperfections" that could be "disastrous in certain areas." The solution, he said, "lies in the growth of the institutional grants which are disbursed within the campus on the basis of decisions made within the university, rather than on the basis of decisions made on a base-by-case basis by the science administrators in the Federal agencies." This is why our association has consistently endorsed the general research support program of the National Institutes of Health and was encouraged by the recommendation of the Wooldridge Committee that the funding for this program be increased to the full 15 percent of the total NIH program.

Despite these difficulties, all these people, as do we in our association, recognize the tremendous achievements that have been brought about, in the medical schools and elsewhere, through the purchase of services, agency-to-individual project grant system. The Wooldridge Committee report suggests that these accomplishments have come about because of the "ability of a handful of unusually competent men" despite the system, rather than because of it. President Elmer Ellis, of the University of Missouri, representing our association before the Subcommittee on Science, Research, and Development of the House Committee on Science and Astronautics, emphasized that Federal expenditures for science and research are fundamentally responsible for the gains we have made as a Nation in these areas. He went ahead, however, to suggest that we should think of some of these funds as "investments" rather than as expenditures. "There is a fundamental difference here of considerable importance to us," he said. "In making an investment, we are interested in the development of a resource. In making a purchase, we are basically interested in its exploitation." The special-purpose, limited-term grant is well suited to the exploitation of our intellectual and educational resources. It is less well suited to their development. Quite clearly, it seems to us, there is a dietary deficiency in the support being provided to the medical schools through Federal assistance.

A major result of this deficiency is a tendency to divide the institution into a number of relatively independent, discrete functional units, each controlled and directed in its most important aspects from outside the institution. Under this condition, the whole does not measure up to the sum of its parts. Something is needed to help it pull itself together—to strengthen its ability for policy determination and coordinated action.

The aid that would be provided through part E of H.R. 3141 is well designed to correct this deficiency. The aid that it would provide—$12,500 plus $250 for each full-time student the first year for each school of medicine, dentistry, and osteopathy, rising to $25,000 plus $500 for each student—is a modest amount in terms of the total cost of operating a medical school. At the University of Arkansas School of Medicine, for example, this would provide, after the first year, something less than $200,000 a year, which is only about one-tenth of the support the university now receives from the Public Health Service through some 90 separate special-purpose grants. The provisions under which these funds would

be granted, however, make them far more important to the medical schools than a mere recital of the figures themselves would seem to indicate. These funds are to be granted to the institutions for the use of the responsible administrative officers on the basis of plans submitted by those officers and reviewed by a National Advisory Council on Medical and Dental Education to see that they "give reasonable promise of strengthening and improving the school's faculty and curriculum."

On this basis, these funds could go a long way toward correcting the dietary deficiency I have discussed. They could go a long way toward correcting the imbalances that are developing between research and the instructional function as a result of the heavy emphasis given to research by the special-purpose grants. They could go a long way toward halting the erosion of the control of the institutions over their own programs. They could go a long way toward making it possible for the responsible administrative officers to plan wisely and meaningfully for the future of the institution and to carry out those plans effectively. They could go a long way toward making it possible for the institutions to fill in the gaps between the point where one special-purpose project ends and another picks up. They would go a long way toward making it possible for each of the medical schools to make full use of its resources in the national interest. They would go a long way toward supplying the "glue" needed to hold the institutions together to protect their basic integrity.

The special improvement grants provided by section 772 of the bill could do much the same sort of thing on a national level. This section, as you know, provides grants of up to $100,000 during the first year of the program, rising to $400,000 over a period of 4 years, to schools of medicine, dentistry, and osteopathy on an individual basis to meet unusual and special needs. This would make it possible for the Federal Government to contribute significantly in developing an equitable geographic distribution of opportunities for the high-quality training of physicians, dentists, and osteopaths. It would make it possible for the Federal Government to provide help for new institutions during the early difficult years. It would make it possible to provide supplementary funds to correct program imbalances at specific institutions, where such corrections are judged to be in the national interest. It would make it possible to think of medical school development on a regional basis.

There is one further point to be made about the aid that would be provided through part E. None of the support now provided by the Federal Government through special-purpose projects grants tends to reduce the cost of education to the student through tuition and fee charges or even to slow up those forces that are causing an increasing percentage of the cost of higher education to be borne by the student and his parents. By providing assistance for those functions normally supported, along with funds from other sources, by student fees and tuitions, aid through part E certainly should work to hold the line on increases in student fees. And this, we feel, is of basic importance in maintaining a fundamental American principle; that is, equality of opportunity.

Finally, we should like to say a word about the proposed National Advisory Council on Medical and Dental Education. We are gratified that there has been proposed an advisory body whose purpose is to consider broadly policy matters relating to the health and vigor of the ability of entire schools to perform their basic functions, rather than to concentrate upon elements and programs within schools. We believe strongly in the considered judgment of peer groups as a guide for action, but we should hope that it would be understood that the peers for a group whose purpose it is to consider institutional development are the administrative officers of institutions. We would, consequently, like to suggest that the "leading authorities in the fields of medical and dental education" from among whom the appointed members of the Council are to be selected are to be found, in general, among the presidents and chancellors of institutions and the deans of medical, dental, and osteopathic schools. Only the people with this type of experience and responsibility can truly be considered peers in matters concerned with "strengthening and improving the school's faculty and curriculum."

As for the scholarship funds provided through part F of H.R. 3141, I have already touched upon the strong feeling within our association of the necessity of preserving, in our country, the principle of equality of opportunity. We feel that this principle is best served through the public acceptance of the social responsibility for providing the basic substance for its own continuous regeneration: the education of its youth. This is provided best, we feel, by providing higher

education by public subvention at a cost that every student can afford. Contrary to what seems to be popular belief, such a system actually does charge more to those who can afford it and less to those who cannot, even where the actual tuition and fee charges are the same for all, since those with larger incomes pay more taxes, and, consequently, a larger percentage of the public subvention.

We have, however, come a long way from the original concept of free tuition, even at public institutions. This is, unfortunately, especially true of medical education, perhaps because, by its very nature, medical education is very expensive. The cost to a student for a medical education averages more than $2,500 a year for 4 full years beyond the bachelor's degree. And time, itself, is an important factor. Including his interneship and residency, the aspiring medical doctor must spend up to 10 years in graduate work before he is ready to practice, in contrast to the 3 or 4 years required of the Ph. D. in, say, chemistry or physics.

The effect of this is easily seen. In 1960, almost half the seniors in medical schools across the country came from families with incomes of $10,000 a year or more, and the median income for the families of medical school seniors was almost twice that of all families. If the present trend continues, it seems clear that only the sons and daughters of the wealthy will be able to consider medical careers in the years ahead; and the size of the father's income, rather than the son's talents, abilities, and ambitions, will determine whether or not a young man enters medical school. It would thus become the first profession in America open only to members of a particular class, as determined by personal wealth.

The subvention of the educational programs provided through part E will, as I have said, help some with this problem. Of even greater help in specific cases, however, will be the aid provided through part F. When it is fully operational (it is, as you know, graduated to apply to one "class" a year until, at the beginning of the fourth year, it would apply to all four classes simultaneously), part F would provide a scholarship fund for each medical, dental, or osteopathic school equal to $2,000 times one-tenth of the full-time student body at the school. These grants are made to institutions, and not to individual students by a Federal agency, for scholarships of up to $2,500 a year.

The use of these funds, in conjunction with the loan funds provided through the extension of the loan program authorized in H.R. 3141, will go a long way toward making it possible for the medical, dental, and osteopathic schools across the Nation to encourage any talented boy or girl, regardless of his family income, to undertake an educational program leading to a career in the health professions with some real possibility of not having it interrupted because of lack of personal funds.

The construction program for teaching facilities for medical, dental, and other health profession schools has proved to be a tremendous aid to the schools in meeting their responsibilities for the education of the doctors, dentists, osteopaths, and other professionals upon whom the maintenance and improvement of our health standards depend. Further, extension of this important program is a logical and necessary companion measure to the general operational support provided through part E. Between them, the two programs would make it possible for the medical schools not only to improve the quality of the educational programs they offer but to increase the numbers of students to whom they offer these programs. Such an increase is essential if we are to meet our national health commitments. This would be especially true if the Congress were to approve the plan for regional centers for heart disease, cancer, and stroke contained in H.R. 3140.

Our association feels strongly that the best interests of the country require support of research through an institutional grant system as well as through continuance of the project system. Excessive reliance on the project system involves the difficulties and expense of attempting to manage thousands of individual projects through central staffs, review panels, and the like. However well it lends itself to short-term, limited-objective research, it does not accommodate itself well to long-term, balanced institutional development. More important, it involves a centralization of the function of judgment. The whole history of the American educational enterprise shows that it is unsound to place in the hands of any group—however wise, well-motivated, and carefully chosen—the all-important responsibility of deciding what individuals, what projects, and what institutions should be selected to discharge our national educational commitments. There is a place, a most important place, for the exercise of this kind of judgment in determining our national effort. This system has produced

excellent results in many areas and should be continued. But we should not continue to place all our eggs in one basket.

There is urgent need for attention to the largely missing element in our Federal assistance—a program designed to strengthen institutional competence for carrying out the basic educational functions—a program to grant institutional authority while imposing institutional responsibility—a program to correct the dietary deficiency in Federal support that tends to erode the ability of the medical schools to create coordinated programs of medical education—a program to restore the balance between the research and instructional functions of the medical schools.

There is an urgent need for H.R. 3141. We earnestly hope that this committee will give this bill its full support.

Dr. MULLINS. I shall try to summarize that testimony in a shorter statement.

I am president of the University of Arkansas, and I am here on behalf of the National Association of State Universities & Land-Grant Colleges.

Our association is composed of 97 State universities and land-grant institutions, with at least one located in each State and Puerto Rico. These institutions enrolled almost 1½ million students this last year, granted a third of the baccalaureate degress and about three-fifths of all doctoral degrees awarded in the United States. Of the 94 medical schools now granting M.D. degrees, 38 are located at these institutions. In addition, seven of the nine new medical schools now in various stages of establishment are at member institutions of our association. Also all three of the 2-year medical schools in this country are members of our association. In 1961–62, these institutions awarded 42 percent of all the first-level professional degrees (including M.D.'s), 59 percent of all second level, and 74 percent of all doctorates in the health professions in the country.

Although our association supports each of the four major provisions of H.R. 3141, we are particularly enthusiastic about part E, which provides for grants to improve the educational quality of schools of medicine, dentistry, and osteopathy. Our enthusiasm stems from the fact that if the colleges and universities of the country are to preserve their basic and unique ability to assist in achieving our national aims and objectives there is, we feel, a need for significant programs of broad, flexible institutional grants to supplement the special-purpose grants carried out through the project system. Part E of the measure incorporates this approach.

The national competence to deal constructively with health problems and the ability of the medical schools of the country to contribute that competence is clearly due in large measure to the support that has been authorized by the Congress of the United States. Therefore, to members of this committee as well as to Members of Congress in general this we believe should be a source of justifiable pride because nothing, of course, is more basic to the welfare of a country than the health of its citizens.

Even though Federal assistance to medical education is vital to the achievement of its primary missions, the mechanism by which most of this support has been channeled to the institutions is best suited to provide assistance for supplementary activities. Special-purpose, limited-term grants taken in and of themselves are not well designed to strengthen the ability of institutions to carry out their fundamental purposes.

The National Association of State Universities & Land-Grant Colleges has long recognized this truth. When the enabling legislation for the National Science Foundation was being considered in the Congress in the late forties, we vigorously supported a plan for distributing some—perhaps as much as 25 percent—of the funds made available to the Foundation in the form of institutional grants, as opposed to grants to individuals at institutions.

Experience with the project-grant system has been such that others have come to agree with us on this important matter. For example, in 1960, the American Assembly concluded in its publication "The Federal Government and Higher Education," that special-purpose, limited-term grants "are covered and executed without aid to higher education being even a secondary purpose."

The same idea was expressed by Dr. James A. Shannon, Director of the National Institutes of Health, and in the report of the President's Study Committee and the National Institutes of Health, headed by Dr. Dean E. Wooldridge. Also a few weeks ago Dr. Frederick Seitz, President of the National Academy of Sciences, pointed out that the project system, despite the fact that it has been "enormously beneficial," had "imperfections" that could be "disastrous in certain areas." The solution, he said, "lies in the growth of the institutional grants which are disbursed within the campus on the basis of decisions made within the university, rather than on the basis of decisions made on a case-by-case basis by the science administrators in the Federal agencies." This is why our association has consistently endorsed the general research support program of the National Institutes of Health and we were encouraged by the recommendation of the Wooldridge committee that the funding for this program be increased to the full 15 percent of the total of the National Institutes of Health program.

Nevertheless, all these people, as do we in our association, recognize the tremendous achievements that have been brought about in the medical schools and elsewhere through the project grant system.

However, we do feel that there is a basic deficiency in the support now being provided to the medical schools through Federal assistance. As a result there is a tendency to divide the institution into a number of relatively independent, discrete functional units, each controlled and directed in its major important aspects from outside the institution. Under this condition the whole does not measure up to the sum of its parts. Something is needed to help it pull itself together and to strengthen its ability for policy determination and for coordinated action.

The aid that would be provided through part E of H.R. 3141 is well designed to correct this deficiency. It would provide a modest amount in the terms of total cost of operating medical schools. It would provide $12,500 plus $250 for each full-time student the first year for each school of medicine, dentistry, and osteopathy, rising to $25,000—$500 for each student.

At the University of Arkansas School of Medicine, this would provide, after the first year, something less than $200,000 a year, which is annually about one-tenth of the support the university now receives from the Public Health Service through some 90 separate special-purpose grants. The provisions under which these funds would be granted, however, make them far more important to the medical

schools than a mere recital of the figures themselves would seem to indicate. These funds are to be granted to the institutions themselves for the use of the responsible administrative officers on the basis of plans submitted by those officers and reviewed by the National Advisory Council on Medical and Dental Education to see that they "give reasonable promise of strengthening and improving the school's faculty and curriculum."

On this basis, these funds could go a long way toward correcting the imbalances that are developing betgeen research and the instructional function as a result of the heavy emphasis given to research by the special-purpose grants. They could go a long way toward halting the erosion of the control of the institutions of their own programs. They could go a long way toward making it possible for the responsible administrative officers to plan wisely and meaningfully for the future of the institution and to carry out those plans effectively. They could go a long way toward making it possible for each of the medical schools to make full use of its resources in the national interest.

The special improvement grants provided by section 772 of the bill could do much the same sort of thing on a national level. This section, as you know, provides grants of up to $100,000 during the first year of the program, rising to $400,000 over a period of 4 years, to schools of medicine, dentistry, and osteopathy on an individual basis to meet unusual and special needs. This would make it possible for the Federal Government to contribute significantly in developing an equitable geographic distribution of opportunities for the high-qualtiy training of physicians, dentists, and osteopaths. It would make it possible for the Federal Government to provide help for new institutions during the early difficult years. It would make it possible to provide supplementary funds to correct program imbalances at specific institutions, where such corrections are judged to be in the national interest. It would make it possible to think of medical-school development on a regional basis.

There is one further point to be made about the aid that would be provided through part E. None of the support now provided by the Federal Government through special-purpose projects grants tends to reduce the cost of education to be borne by the student through tuition and fee charges or even to slow up those forces that are causing an increasing percentage of the cost of higher education to be borne by the student and his parents. By providing assistance for those functions normally supported, along with funds from other sources, by student fees and tuitions, aid through part E certainly should work to hold the line on increases in student fees. And this, we feel, is of basic importance in maintaining a fundamental American principle—equality of opportunity.

Finally, we should like to say a word about the proposed National Advisory Council on Medical and Dental Education. We are gratified that there has been proposed an advisory body whose purpose is to consider broad policy matters relating to the ability of entire schools to perform their basic functions, rather than to concentrate upon elements and programs within schools. We believe strongly in the considered judgment of peer groups as a guide for action, but we should hope that it would be understood that the peers for a group whose

purpose it is to consider institutional development are the administrative officers of institutions. We would, consequently, like to suggest that the "leading authorities in the fields of medical and dental education" from among whom the appointed members of the Council are to be selected are to be found, in general, among the presidents and chancellors of institutions and the deans of medical, dental, and osteopathic schools. Only the people with this type of experience and responsibility can truly be considered peers in matters concerned with "strengthening and improving the school's faculty and curriculum."

As for the scholarship funds provided through part F of H.R. 3141, I have already touched upon the strong feeling within our association of the necessity of preserving, in our country, the principle of equality of opportunity. We feel that this principle is best served by providing higher education at costs that every student can afford.

We have, however, come a long way from the original concept of free tuition, even at public institutions. This is, unfortunately, especially true of medical education, perhaps because, by its very nature, medical education is very expensive. The cost to a student for a medical education averages more than $2,500 a year for full years beyond the bachelor's degree. And time itself is an important factor. Including his intership and residency, the aspiring medical doctor must spend up to 10 years in graduate work before he is ready to practice, in contrast to the 3 or 4 years required for the Ph. D in, say, chemistry or physics.

The effect of this is easily seen. In 1960, almost half the seniors in medical schools across the country came from families with incomes of $10,000 a year or more, and the median income for the families of medical school seniors was almost twice that of all families. If the present trend continues, it seems clear that only the sons and daughters of the wealthy will be able to consider medical careers in the years ahead; and the size of the father's income, rather than the son's talents, abilities, and ambitions, will determine whether or not a young man enters medical school. It would thus become the first profession in America open only to members of a particular class, as determined by personal wealth.

The use of these scholarship funds in conjunction with the loan funds provided through the extension of the loan program authorized in H.R. 3141, will go a long way toward making it possible for any talented boy or girl, regardless of his family income, to undertake an educational program leading to a career in the health professions.

The construction program for teaching facilities for medical, dental, and other health profession schools has been proved to be a tremendous aid to the schools in meeting their responsibilities for the education of the doctors, dentists, osteopaths, and other professionals upon whom the maintenance and improvement of our health standards depend. Further extension of this important program is a logical and necessary companion measure to the general operational support provided through part E. Between them, these two programs would make it possible for the medical schools not only to improve the quality of their educational programs but to increase the numbers of students served. Such an increase is essential if we are to meet our national health commitments.

Therefore, our association feels strongly that the best interests of the country would be served by the enactment of H.R. 3141 and we

earnestly hope that this committee will give this bill its full support.

Thank you very much.

The CHAIRMAN. Dr. Mullins, thank you very much for your statement and your supplemental statement may be included in the record.

Are there any questions by members of the committee?

Mr. CARTER. No, sir.

The CHAIRMAN. Dr. Mullins, as a matter of information to use as an example, how many medical students do you have in the University of Arkansas Medical School?

Dr. MULLINS. I believe it is about 375. It is approximately 375.

The CHAIRMAN. How many do you have usually? Approximately how many do you accept in your freshman class?

Dr. MULLINS. A little over 100; 105, is it not?

Mr. WHALEY. 105.

Dr. MULLINS. 105 in the freshman class.

The CHAIRMAN. 105?

Dr. MULLINS. Yes.

The CHAIRMAN. How many do you graduate on an average? How many did you graduate this year?

Dr. MULLINS. We will graduate 79 this year at the exercises on Sunday. This is a little larger group than we normally graduate.

Mr. WHALEY. Smaller than we will on the basis of 105.

Dr. MULLINS. We have not been taking 105 students except for the last 2 years, as I recall, and we were accepting around 90 and, therefore, later the number will increase beyond the 79 which will be graduated this year.

The CHAIRMAN. Do you have your full complement? In other words, do you have all that you can take care of?

Dr. MULLINS. Our medical school was designed to accommodate 125 entering students, but we have not been able to open enough beds in our teaching hospital and get enough support to enable us to accept the full complement.

The CHAIRMAN. Are you making progress with it?

Dr. MULLINS. Yes, we are making progress with it, and I hope that within a short time we will be able to increase the number of students we accept.

The CHAIRMAN. If you accept 125 as your full complement, when you reach that, what percentage would you expect to graduate? There must be some dropouts along the way as usual in everything else.

Dr. MULLINS. Yes. I believe I would like to ask Mr. Whaley to speak to that question.

Mr. WHALEY. The attrition rate will probably mean that we would graduate around 105 of this 125, perhaps, 110.

The CHAIRMAN. You do not have a dental school, do you?

Mr. WHALEY. We do not.

The CHAIRMAN. You do not have an osteopathic school?

Mr. WHALEY. No.

The CHAIRMAN. We have optometry in our State—I mean in education.

Dr. MULLINS. No, we do not have, Mr. Chairman.

There is one bit of information which the committee might like to have regarding the needs of our students. On the basis of those stu-

dents in the medical school who are receiving aid in terms of loans or scholarships we made a check to find what the average family income was of those students, and we found that the average family income was $5,900 for those students who are now receiving aid.

I make that point to indicate that the scholarship aspect of this program and the loan aspect are very important facets to the increasing numbers of students who might attend medical school.

The CHAIRMAN. What percentage of your students are receiving scholarships and loans at the present time?

Dr. MULLINS. Mr. Whaley, would you like to answer that?

Mr. WHALEY. We have that information on the senior class; 32 of the 79 seniors are now receiving assistance of this kind, one kind or another.

Dr. MULLINS. And 8 of the 13 top students this year are among those who are receiving assistance.

Isn't that correct, Mr. Whaley.

Mr. WHALEY. That is correct.

The CHAIRMAN. Other than the 15 or 20 institutions that Dr. Berson spoke of a moment ago, would you say that the University of Arkansas Medical School is about on a par on average with the others in the country?

Dr. MULLINS. Of course, I am not familiar in detail with the medical schools other than of the University of Arkansas, but we think we do have a very fine medical school and I think it would be in general on a parity with most medical schools, certainly State universities.

The CHAIRMAN. In other words, the needs and the requirements of the University of Arkansas would be considered about the same as those in other universities insofar as our medical education is concerned?

Dr. MULLINS. Mr. Chairman, I believe that we accept a larger number of entering students than most medical schools at State universities. We have a rather large student body.

Am I correct, Mr. Whaley?

Mr. WHALEY. The last check we made on this on size of our freshman class, we were 24th out of some 86 or 87 schools, so we would be——

The CHAIRMAN. I am just talking about generalizations now and trying to see if the conditions for students at the University of Arkansas would, generally speaking, be the same as those for most of the students in the Nation. Now for the $64 question, if I may be permitted to use that term after these 7 years, and that is if this legislation does not pass are you in a position to state how serious it would be with your own institution?

Dr. MULLINS. Well, it would certainly slow our progress. We would make much greater progress with this help than we can without it. So we consider this quite vital to the continued deevlopment of our medical school.

The CHAIRMAN. Do you think that the medical institutions of the country would fail to meet their requirements and to provide for the Nation's needs in manpower; that is, manpower in the field of medicine, health, and so forth, if we failed to provide this legislation?

Dr. MULLINS. Yes, sir; I think so. I think it is going to take the help of the Federal Government as well as the States to meet the demand of the future n the fields of the health professions.

The CHAIRMAN. In other words, you feel that the requirements to serve the population would fall short——

Dr. MULLINS. Yes, sir.

The CHAIRMAN. If this was not accomplished?

Dr. MULLINS. Yes, sir; I do. In fact, it will be difficult with this legislation for us to meet the requirements in terms of numbers of physicians in relation to our population.

The CHAIRMAN. Mr. O'Brien.

Mr. O'BRIEN. Doctor, I heard you give a figure. I want to know if I heard it correctly. Did you say 8 of the 13 top students in your graduating class were people receiving some sort of assistance?

Dr. MULLINS. Yes, sir.

Mr. O'BRIEN. In other words, of those, 8 of the 13 would be in that group of families with incomes averaging $5,900 a year?

Dr. MULLINS. Yes, sir, that is correct.

Mr. O'BRIEN. If they did not have some form of assistance then you would have lost 8 of your top 13, is that right?

Dr. MULLINS. That would be a reasonable assumption.

Mr. O'BRIEN. Thank you.

The CHAIRMAN. Any further questions?

Doctor, thank you very much for your appearance here. I appreciate you and Mr. Whaley being here with us and helping provide the information and make the record on this important legislation.

Dr. MULLINS. Thank you very much, Mr. Chairman and members of the committee.

The CHAIRMAN. We will recess for approximately 25 minutes at which time we will be back in deference to you other gentlemen waiting here to be heard.

(Whereupon at 11:15 a.m., the committee recessed, to reconvene at 11:55 a.m. the same day.)

The CHAIRMAN. The committee will come to order.

We will proceed with the hearing and next on the list for presentation here is Dr. Lester Burket, member of the Council on Dental Education of the American Dental Association.

Doctor, I believe you are the dean of the Dental School, University of Pennsylvania.

Dr. BURKET. That is correct.

The CHAIRMAN. We will be glad to have your statement, Doctor.

STATEMENT OF DR. LESTER W. BURKET, DEAN, UNIVERSITY OF PENNSYLVANIA SCHOOL OF DENTAL MEDICINE AND MEMBER OF THE COUNCIL ON DENTAL EDUCATION OF THE AMERICAN DENTAL ASSOCIATION; ACCOMPANIED BY DR. WILLIAM R. MANN, DEAN, UNIVERSITY OF MICHIGAN SCHOOL OF DENTISTRY, REPRESENTING THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS; REGINALD H. SULLENS, EXECUTIVE SECRETARY, AMERICAN ASSOCIATION OF DENTAL SCHOOLS; AND BERNARD J. CONWAY, CHIEF LEGAL OFFICER, AMERICAN DENTAL ASSOCIATION

Dr. BURKET. Mr. Chairman, I have with me Dr. William R. Mann on my right. He is the dean of the University of Michigan School of Dentistry, and he is here on behalf of the American Association of Dental Schools.

The CHAIRMAN. Dr. Mann, we are very glad to have you join with Dr. Burket in the presentation of your statement.

Dr. BURKET. Accompanying us are also Mr. Reginald H. Sullens, on Dr. Mann's right. He is the executive secretary of the American Association of Dental Schools.

The CHAIRMAN. Glad to have you.

Dr. BURKET. And Mr. Bernard J. Conway, chief legal officer of the American Dental Association.

The CHAIRMAN. Glad to have you.

Dr. BURKET. Mr. Chairman, we ask to testify together in order to conserve the time of the committee and because the two organizations which we represent are in agreement both in praising the fine achievements of Public Law 88–129 and in recommending that the law be extended.

With your permission, however, we will submit separate statements.

The CHAIRMAN. Your statements will be included in the record, respectively, at this point.

(The prepared statements of Dr. Lester W. Burket and Dr. William R. Mann follow:)

STATEMENT OF THE AMERICAN DENTAL ASSOCIATION

Mr. Chairman and members of the committee, my name is Dr. Lester W. Burket. I am dean of the University of Pennsylvania School of Dental Medicine and a member of the Council on Dental Education of the American Dental Association. I am here today representing that association.

Seated with me is Dr. William R. Mann, dean of the University of Michigan School of Dentistry. Dr. Mann is here on behalf of the American Association of Dental Schools.

Accompanying us are Mr. Reginald H. Sullens, executive secretary of the American Association of Dental Schools, and Mr. Bernard J. Conway, chief legal officer of the American Dental Association.

We asked to testify together, Mr. Chairman, in order to conserve the time of the committee and because the two organizations are in agreement both in praising the fine achievements of Public Law 88–129 and in recommending that the law be extended. With your permission, however, we will submit separate statements for the record.

In 1963, which dental witnesses had the privilege of coming before this committee to discuss the legislation that led to enactment of Public Law 88–129, they said: "This measure is aimed at relieving what is probably the most critical problem in the health field today: The impending shortage of health personnel."

That problem remains with us, but in the short time that activities authorized by Public Law 88–129 have been going on, considerable progress has been made in meeting it.

CONSTRUCTION

On the basis of the most recent figures available to us in construction, for example, we note that a total of nine dental applications have now been funded under the law. Of these, one is a totally new school, six are institutions that are engaged in major expansion and substantial replacement of their existing facilities and two are involved in less major renovation or rehabilitation. Schools in the East, in the Midwest, on the west coast and in the South are included. These projects alone will increase the number of first-year dental student places by about 300, an increase of nearly 10 percent in this 2-year period.

In addition to the applications that have been approved and funded, we understand that 11 more applications have been submitted and, in some cases, have had at least some action taken on them. Additional applications, perhaps as many as five, will probably be submitted prior to the filing deadline, June 30, 1965.

Twenty-five dental applications, then, have been or will be filed by the end of fiscal 1965. Were all these applications to be approved and funded, it would mean providing a total from 700 to 730 new, first-year places.

The fact is, however, that no more than half of these applications can be funded under the existing authorization, despite the fact that they are all well planned and badly needed. Under the current 3-year authorization, $43.75 million is available for construction expansion and rehabilitation of dental schools. According to our information, there is a need for about $86 million, leaving a deficit of more than $42 million just in relation to those applications that are already on file or can be reasonably expected by the deadline.

The fact that a backlog has already developed is not, in the association's opinion, surprising. The need for Federal assistance in constructing schools for the health professions is of long standing. The American Dental Association, together with a number of other health groups, petitioned Congress on this subject for a number of years before legislation was finally passed. The chairman of the committee is, of course, well acquainted with these facts at it was his strong and consistent leadership as much as anyone's that made enactment finally possible.

Since the situation dates some years back, then, it was to be expected that when legislation was passed, the accumulated need of the Nation's schools of health would exert an immediate and sharp pressure on the available funds. It is essential, in the association's opinion that, while we can take pride in what has already been accomplished, we recognize at the same time that our efforts must continue at least at the same pace for the foreseeable future.

H.R. 3141 calls for a 5-year extension of Public Law 88–129. The association believes that such a time limit is desirable in that it both satisfies the need for continuity in administration and recognizes that Congress rightfully should have an opportunity to review all such legislation periodically.

A brief survey of available projections concerning dental manpower is sufficient to demonstrate the fact that it is necessary to continue the work begun in 1963 with passage of this law.

At present, the total dentist supply in the United States is approximately 105,000. This amounts to a ratio of about 1 dentist to every 1,900 people. If we are to maintain this ratio, we will need approximately 139,000 dentists by 1980.

If the current rate of dental graduates remains constant, however, we will not be able to maintain this ratio. We will fall short of maintaining it by some 10,000 dentists. And this is a most conservative estimate since it makes no allowance whatever for the increased demand for dental care that can be reasonably foreseen.

What the American Dental Association believes is minimally necessary, then, is that section 720 of Public Law 88–129 be extended in such a way as to enable the Nation's dental schools to have the prudent expectation of at least coming close to making up this deficit of 10,000 dentists.

The association believes this could be done if Congress would allocate $25 million a year for category 2 funds (to assist in the construction of new teaching facilities for the training of dentists) and $35 million a year in category 3 funds (for replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, professional public health personnel, or dentists).

Were these sums allocated, it would make available to dental schools the annual sum of approximately $33.75 million. This total is arrived at by adding to the proposed $25 million in category 2 funds, $8.75 million as dentistry's share of the category 3 funds.

Under the current authorization, dentistry has been receiving one-fourth of the category 3 funds. The association believes that this is an equitable division and assumes that it will be continued in the future.

Given this annual allocation of roughly $33 million, it may be possible to be graduating by 1980 nearly twice as many dentists annually as would be possible if this law were not extended. The association, thus, believes that such allocations are realistic in light of what we can expect in the future. We urge the committee to authorize these sums in extending section 720 of Public Law 88–129.

PLANNING MONEY

In regard to the construction section of the law, the association believes the committee should add an amendment allowing for moderate and carefully controlled amounts of planning money.

A health professions school is expensive to build under the most ideal conditions. A typical, new dental school capable of graduating 100 students an-

nnaliy can be expected to cost $10 million or more. Planning ahead in detail gives us the best possible hope of constructing buildings that will be as functional and economical as possible.

If, in authorizing planning money, the committee would identify it separately and then award it only on a matching basis—perhaps of one to one—this would discourage a State or institution from requesting planning money until it has firmly decided to proceed with the project and has allocated funds of its own to guarantee that intention.

ADMINISTRATION OF CONSTRUCTION SECTION OF PUBLIC LAW 88-129

Finally, before concluding our remarks on the construction aspects of Public Law 88-129, the association would like to take this opportunity to commend publicly the excellent administration of this section of the law that has been provided by the Public Health Service's Division of Dental Public Health and Resources. Every experience we have had and everything we have heard from schools applying for assistance demonstrates that the dental Division's administration has been considerate, efficient, and thoroughly in compliance with congressional intent.

LOANS

The American Dental Association would also urge the extension of the student loan program. Thus far, under the law, some $18 million has been distributed to 147 health professions schools with a total enrollment of nearly 49,000. Forty-six dental schools are included in this total and recent surveys have shown that the average loan made to a dental student under this program is $950.

In talking about the health needs of the Nation, we are more accustomed to speaking in terms of millions or tens of millions of dollars. On that scale, an average loan of $950 doesn't seem substantial. Yet the information we have indicates that it can—and has—made the difference between a student being able to continue his studies or face the possibility of interrupting or terminating them.

Education for a profession is an expensive process. The average cost to students and the concomitant need of schools for assistance in helping the students. costs of the 3 or 4 years of undergraduate education that is a requisite for entry into the professional school. Indeed, the most recent studies indicate that with preprofessional college, dental school itself, and then establishment of an office, the average total cost nears $35,000.

When one considers this in light of the fact that the median family income in the United States is less than $7,000 a year, it is all too clear that one of two things must happen: either financial assistance must be made available to students so they can be admitted on the basis of their scholarly promise and professional commitment or we will have to admit frankly that only the sons of the well-to-do can become dentists. Surely we can all agree that this latter alternative is undesirable. Achievement in this country is traditionally and rightly based on the ability and effort of the individual, not on the income of that individual's father.

A number of studies have been made on this question of financial need of students and the noncomitant need of schools for assistance in helping the students. A few citations from these studies might well serve to bring this matter into clearer perspective.

A 1962-63 survey revealed that 32 percent of the Nation's dental students applied for and received loans. An additional 23 percent reported a need for financial assistance but for one reason or another the university was not able to help them. More often than not, the reason was simply that the available funds were too scarce to go around. Again, nearly 2 out of every 10 dental students report an interruption in their education between college and dental school, giving, as often as not, the reason that they had exhausted their financial resources. The length of interruption averaged 2.4 years. Further, 70 percent of the dental students in a recent year reported that they were forced to hold full or part-time jobs during the school year.

Finally, our understanding is that in fiscal 1965, when a maximum of $10.4 million was available for loans, the health professions schools identified a need for loans totalling $19.7 million. And in the coming fiscal year, when a maximum of $15.4 million will be available, the schools identify a need for $20.9 million.

We cannot, of course, Mr. Chairman, speak with any authority as to the needs of medical or osteopathic students in the coming years. But in regard to dental schools alone, it is our information that in the current year the schools identified

some 5,500 students as being in need of assistance and requested an allocation of some $7 million. With this in mind, then, the American Dental Association would request that Congress extend the loan section of Public Law 88–129 to the extent that in each year the dental schools of the Nation will have available from it some $7 million as the amount realistically necessary to satisfy this need.

The association also believes that the provision in H.R. 3141 for increasing the maximum loan amount per student to $2,500 is desirable. It recognizes the fact of heavy costs and also keeps the program comparable to loans available to graduate and professional students under the National Defense Education Act.

SCHOLARSHIPS

H.R. 3141, in addition to extending the present provisions of Public Law 88–129, would establish two new programs. One would grant scholarships to a maximum of $2,500 per student. As we understand this provision, it would extend this type of assistance to talented young people from low-income families and would be allocated on the basis of approximately 10 percent of a given class. Within these prescribed limitations, the association believes this new program to be well-advised.

There are two points regarding this new section that we would like to discuss briefly.

The first is that scholarships and loans are not identical and in supporting the establishment of scholarships, the association is not merely identifying another way of increasing the assistance available to present dental students.

As has already been said, dental education is a highly expensive proposition for the student. Even with the provision of loans, we are still not opening it to all who are capable of undertaking it. There are still young people from families whose incomes are such that the costs remain a powerfully inhibiting factor. In addition to the total cost of $35,000 that was alluded to earlier, it must be kept in mind that the average dental student today is heavily in debt when he graduates. Among those who come from lower income families, 88 percent are in debt at the time of graduation and the average indebtedness is nearly $9,000. The provision of scholarships would do much to mitigate this undesirable situation.

The second point we should like to make bears on the competitve position of the health professions in relation to those disciplines commonly referred to as the life sciences.

When it comes time for a young man of scientific talent and bent to make a career decision, he will find that if he chooses one of the life sciences there is considerable oportunity for him to receive fellowships while working toward his doctorate or when pursuing postdoctoral studies. Through the years, as this committee is undoubtedly aware, Congress has enacted a number of fellowship programs in the life sciences.

For example, a recent survey showed that 80 percent of the life science graduate students receive some form of nonrefundable support. The average amount is $2,700. Among dental students, only 19 percent receive such support and here the average sum is $430.

What is being requested is the establishment of a similar fellowship effort for the health professions. The bill refers to them as scholarships but in point of fact they are indistinguishable from what are defined as fellowships in the life science area.

The fact of the matter is that the Nation will be needing more dentists, as well as other health professionals, in the foreseeable future. In addition to financial assistance in terms of construction and loans, the profession needs to be in a position where it can fairly compete with other career fields for the best available talent. Federal activity in providing fellowships in the life sciences have unquestionably put dentistry and the other health professions at a competitive disadvantage. Provision of similar fellowships for the health professions would redress this disadvantage.

OPERATING EXPENSES

We have twice in our testimony alluded to the fact that a dental education is expensive for the student. It is also expensive for the school that provides it. In recent years, the expenses the school must bear have risen so sharply that some are now in a serious situation and may well find it impossible to continue to provide the kind of quality education they should. H.R. 3141 provides

partial solution to this difficulty by proposing the establishment of a section providing basic and special improvement grants for schools of dentistry, medicine and osteopathy.

In 1949, the total operating expense of the Nation's dental schools was $20 million, an average of $500,000 per school. By 1964, total operating expenses had risen to $66 million, an average of nearly $1.4 million per school. In the past 15 years, then, the operating expenses of the Nation's dental schools have risen nearly 300 percent.

The same trend can be seen when you consider the per student expenditure of the schools. In 1949, this amounted to $1,800. By 1964, it had risen to $3,700.

Through the years, the amount of cost that is borne by the student through payment of tuitions, fees, and other charges has markedly decreased. In 1924, the student payment met approximately half the school's operating costs. By 1949, this had decreased to about one-third of the total cost and by 1964, student payments met only 26 percent of the school's operating costs. Further dental schools do not have any real access to supplementary funds. Nineteen of the dental schools are totally without any source of support from private endowment income, gifts, non-Federal grants, or other private sources. An additional 21 schools receive less than $50,000 a year from such sources.

Nor is there reason to expect that operating costs will decrease or even stabilize. Indeed, every expert estimate with which we are familiar indicates the opposite. By 1974 it is estimated that the per student expenditure that today is $3,700 will have risen to $5,300.

In contrast to the actual level of expenditures in 1964 for regular program (as distinct from research program), which was $51 million, the dental schools report that $81 million is required for truly adequate operation. Of this additional $30 million, some 70 percent is needed, according to the schools for improvement of the present teaching program. The additional amount is needed for such new but essential programs as teacher preparation, hospital dentistry, care of the chronically ill and preventive dentistry.

Based on these estimates, the average unmet financial need per school is about $625,000. The amount currently needed to bring per student expenditures to the desirable level averages about $3,000 per student.

Under the operating grants section of H.R. 3141, approximately $4.1 million would be distributed to the dental schools in the first year and some $8 million during subsequent years. This would not wipe out the current operating deficit in the majority of schools but it would give them much needed stimulus to undertake the new programs they know are necessary as well as improve the effectiveness of current programs.

The difficulties in operating expenses being faced by the dental schools as well as the schools of other health professions, is, of course, only the opposite side of the coin from the remarkable improvements in preventing and controlling disease that have been made within recent years. The body of knowledge that must be taught today is immeasurably broader; the armamenterium of the dentist is considerably more diverse and complex than it was; the research possibilities are infinitely greater and, finally, the Nation's commitment to public health measures has increased.

No one, surely, would want to trade the level of health care possible today for what was possible 20 or 30 years ago. Our hope is that the Nation will be even healthier 10 years from now than it is today. But the process is expensive and the schools have carried the burden with current resources too long. The Federal Government has a proper and legitimate interest in health as a national resource. Establishment of operating assistance to dental schools is one way for the Federal Government to make concrete its legitimate interest in this matter.

While the American Dental Association, then, does favor the establishment of basic and special improvement grants as envisioned in H.R. 3141, there is one caution it would like to make.

The association firmly believes that those who would be charged with the responsibility of administering this section, should it be enacted, would not expect or want to exercise any control over the curriculum, teaching personnel, or other aspects of the education process. Those who framed the bill assumed, we are sure, that the school itself would continue to be the sole judge of such matters.

In order that this be crystal clear, however, the association strongly requests that the committee, if it looks with favor on this section of the bill, make it explicit that the long-standing policy remains in force. It is recommended that the committee make section 726 applicable to all of title VII of the Public Health Service Act. Section 726 at present reads:

"Nothing contained in this part shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over, or impose any requirement or condition with respect to, the personnel, curriculum, methods of instruction, or administration of any institution."

NATIONAL ADVISORY COUNCIL ON MEDICAL AND DENTAL EDUCATION

Public Law 88–129 has established a National Advisory Council on Education for Health Professions to assist and advise the Surgeon General. H.R. 3141 would retain this Council in being but would establish an additional Council—the National Advisory Council on Medical and Dental Education—to administer the operating grants and scholarship sections which are being suggested as additions to the law.

The association certainly does not wish to hobble the administration of the law in any way. Nonetheless, we are unable to understand the reasons for such duplication and do not believe that it would be wise. Consequently, we would recommend to the committee that it not approve establishment of this additional Council.

SUMMARY

(1) The American Dental Association believes it is essential that Congress extend Public Law 88–129 for an additional period of time.

(2) For construction, replacement, and rehabilitation of dental schools, the association believes the committee should authorize the expenditure of $25 million a year in category 2 and $35 million a year in category 3 of section 720. The association wishes to commend the administration of this section of the law that has been provided by the Public Health Service's Division of Dental Public Health and Resources.

(3) The loan program should be amended to permit a maximum loan of $2,500 per student. Based on need, dental schools should be authorized to receive approximately $7 million a year for the purpose of making loans to their students.

(4) The scholarship, or fellowship, provision of H.R. 3141 is, in the association's opinion, well advised and should be approved by the committee.

(5) The basic and special operating grants for schools of the health professions are also necessary and should be approved by the committee. It should be made clear, however, that the school itself is the final judge of matters relating to the educational process.

(6) The establishment of a second Council to administer sections of Public Law 88–129 is, the association believes, unnecessary.

STATEMENT OF THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS

Mr. Chairman and members of the committee, I am Dr. William R. Mann, dean of the University of Michigan School of Dentistry and chairman-elect of the association's committee on curriculum. With me is Mr. Reginald H. Sullens, secretary of the American Association of Dental Schools.

The American Association of Dental Schools is pleased to have this opportunity to present testimony in support of H.R. 3141, the "Health Professions Educational Assistance Amendments of 1965." This bill, if enacted by the Congress, will have a positive and substantial impact upon the future dental health of the American public by making it possible to increase the number of doctors of dentistry, by providing assistance for improvements in the teaching programs of dental schools, and by providing loans and scholarships for young scholars who otherwise will not be able to consider a career in dentistry. In the opinion of this association, H.R. 3141 identifies three of the most crucial problems facing dental and other health professional education today.

In commenting on the several provisions set forth in H.R. 3141, the association will first present testimony in favor of the extension and expansion of Public

Law 88–129 to continue Federal grants-in-aid for constructing dental teaching facilities and for providing needed improvements in the current program for dental student loans. Second, the association will present evidence in support of the urgent need for the new programs which would be made possible through the enactment of H.R. 3141; namely, basic and special improvement grants for raising the quality of dental education, and the establishment of a program of federally supported scholarships for dental students.

EXTENSION OF THE CONSTRUCTION GRANT PROGRAM

During the past decade, the American Association of Dental Schools and the American Dental Association have appeared repeatedly before committees of the Congress to call attention to the growing seriousness of a shortage of dentists. In addition, this problem has been reviewed on several occasions by special governmental and public commissions, in each case supporting the need for expanding the number of professionally educated health personnel needed to care for the physical well-being of our people. With the support of this distinguished committee, the Congress enacted Public Law 88–129 in Sepetember 1963 which provided for Federal grants-in-aid for the construction of new and expanded facilities and for the rehabilitation of existing dental educational institutions. Figures will be presented in this statement to show the impact which Public Law 88–129 has already had but, first, the association would like to emphasize the urgency of prompt action on extending the construction grant program in order to assure that the progress which has been made will result in maximum benefit to the citizens of our country.

Under the existing legislation an application for Federal assistance for construction of a dental school cannot be considered unless it is submitted to the Surgeon General prior to July 1, 1965. Although Public Law 88–129 was enacted in late 1963, the appropriation of funds and the development of full-scale planning was not achieved until the fall of 1964. Since that time, as will be pointed out later in this statement, a tremendous momentum in new and expanded facility planning has developed to the point where we can anticipate really significant accomplishment in meeting the dental manpower needs, if the Congress authorizes the extension and expansion of the Health Professions Educational Assistance Act promptly.

In 1963, there were 105,950 dentists in the United States, including those who were retired, or were employed in positions in which they did not practice dentistry, providing a ratio of 54.6 dentists to each 100,000 individuals. To maintain even this ratio of dentists to population, which is considered low by most officials, the dental schools will need to graduate more than 70,000 dentists between now and 1980. At the present rate of graduation, only slightly more than 55,000 graduates can be anticipated by that time which would leave a deficit of over 15,000 in the number of dentists graduating between now and 1980. With such a deficit, the projected ratio of dentists to population would decline to about 50 dentists to each 100,000 persons.

The enactment of the Health Professions Educational Assistance Act of 1963 was a significant step in the direction of alleviating the shortage of dental manpower. As of April 1965, nine dental construction applications had been approved and funded. These projects will, when completed, increase the number of first year places in dental schools by approximately 300. In addition, 11 other applications have been filed and are under some stage of consideration and 5 or 6 applications are expected before the July 1, 1965, deadline. These pending applications and those expected in the near future would provide for 400 additional first-year places. It should be noted, however, that funds presently authorized under Public Law 88–129 will support only about one-half of the construction contemplated under applications already on file. From the approximately 25 dental applications which have or will be submitted by July 1, 1965, it is estimated that the Federal share of construction cost would be about $86 million. A total of approximately $44 million is available from moneys appropriated under the current authorization, representing both the funds available for the construction of new facilities and for the replacement or rehabilitation of existing institutions. Therefore a deficit or backlog in excess of $42 million can already be predicted by the time the Health Professions Educational Assistance Act of 1963 expires.

Based on applications presently funded and a projection of those applications which can be funded under existing legislation, it is estimated that the number of first-year places will be increased to 4,300 by 1980. As helpful as

this increase will be, however, an expansion of educational capacity in this amount will not keep pace with the needs of the population for it is predicted that the ratio of dentists to population will decrease to about 50.6 to 100,000 by 1980, without an extension of Public Law 88–129.

In early 1965, the association undertook a survey of existing dental schools as well as universities which have reported an interest in considering the establishment of a school of dentistry. Results from that survey showed an interest on the part of nearly every dental school in the country in expanding its enrollment capacity and eight universities, in addition to three that have filed applications, indicated a fairly definite intent to embark upon a dental education program. The projected plans of these several institutions indicated the potentiality of expanding first-year places in dental schools by an additional 1,250, provided adequate Federal assistance can be anticipated. Although an expansion of this magnitude would go a long way toward supplying the number of dentists estimated as necessary by 1980, the task cannot be accomplished without an extension and a substantial expansion of the present Federal assistance program.

As has already been indicated, applications are presently on file for an additional $42 million of Federal assistance beyond the funds authorized in Public Law 88–129. The 1965 Survey of Dental School Program Plans and Needs, to which reference has already been made, produced an estimated cost for construction projects planned by existing and new dental schools in a total amount of nearly $288 million. The projected Federal share of this construction, which would be undertaken within the next 10 years, was $157 million. It was learned from the survey that a total of 53 construction projects are underway or being planned, including the total replacement of expanded facilities for 23 existing schools, additions to or renovation of the facilities for 19 institutions and the possible construction of 11 new dental schools.

As a result of the momentum which has been started by Public Law 88–129, many of these planned construction projects are at a stage where they can and will proceed as promptly as Federal matching funds become available. The survey revealed, for example, a projected need for more than $86 million of Federal matching funds during the next 3 years. The American Association of Dental Schools, based upon the backlog which will accumulate in the remaining life of Public Law 88–129 and upon the clearly demonstrated need for additional educational facilities in the future, recommends that a minimum of $25 million annually be provided for new and expanded dental school facilities during the period of time covered by H.R. 3141.

In addition to new and expanded construction, Public Law 88–129 provides assistance for the replacement or rehabilitation of existing dental educational facilities, the funds for which are shared with other health professions included in the present legislation. Under the existing program, there has been administrative agreement that one-fourth ($8.75 million) of the total authorization will be utilized for the support of dental school rehabilitation. Although the funds currently available specifically for rehabilitation and renovation of dental educational institutions have not been adequate to meet the needs, the association is in agreement with the proration pattern which has been established and urges that it be continued during the extension of the Health Professions Educational Assistance Act. It is also recommended that the committee give consideration to identifying a minimum authorization of $35 million per year to be utilized for the rehabilitation or renovation of the health professional education institutions included in the legislation.

The association would like to express one concern related to the interpretation of the function of a modern school of dentistry. Dental schools are, perhaps, unique among the health professional schools in that they must, within their own facilities, attempt to provide the student with a total orientation and experience for professional practice. Included in this educational process should be the opportunity for a dental student to learn, in some detail, the proper and effective utilization of dental auxiliary personnel and an opportunity to become familiar with the training and experience which these personnel can be expected to have when called upon by the dentist in practice. Additionally, a substantial portion of the advanced educational programs which are needed to prepare dental research scientists, teachers, and specialty practitioners are offered within the confines of the school of dentistry. It is, therefore, important to view the dental educational institution as a complex and comprehensive facility which should have the capacity for conducting all facets of dental education which are of importance in providing the public with the highest possible level of dental care.

In recognition of this concept, the executive council of the American Association of Dental Schools adopted a resolution in February 1965, urging "that any extension of Federal legislation related to grants-in-aid for dental education facilities be designated to encompass the total spectrum of dental education, including the facilities for advanced educational programs and auxiliary education."

It is hoped that the committee will concur with this description of the function and responsibilities of a modern dental school and provide assurance, through any means considered appropriate, for the use of Federal matching funds in the construction or renovation of a complete dental educational facility.

The American Association of Dental Schools would also like to request the committee's consideration of an additional need related to the construction grant program. Perhaps one of the most critical stages in the development of a professional educational institution is the planning which must be done prior to the preparation of an application proposal and the beginning of construction. It is at this stage that many decisions are made which will have an important and permanent influence on the adequacy and adaptability of the facility which is to be constructed. Although the amount of money involved in the planning of a dental educational institution varies a great deal, experience has shown that this amount is sometimes sufficient to delay the planning process by many months or years or, even more unfortunate, to result occasionally in planning which was not as forward-looking as it might have been because of the lack of adequate planning funds. The association urges, therefore, that the committee add a provision to H.R. 3141 which would make Federal funds available on a 1-to-1 matching basis to be used for the planning of dental educational facilities.

In concluding its comments on this section of H.R. 3141, the American Association of Dental Schools wishes to record its appreciation for the excellent manner in which the staff of the Division of Dental Public Health and Resources of the U.S. Public Health Service has carried out the administration of the construction grant program under Public Law 88–129. The efficiency and untiring effort of the Division staff, coupled with the extensive service which has been provided by the Dental Review Panel, have resulted in a truly remarkable administration of a large and complex program.

EXTENSION OF THE STUDENT LOAN PROGRAM

The American Association of Dental Schools vigorously endorses the provisions of H.R. 3141 which would extend the availability of loans for students of dentistry and which would raise the ceiling on these loans to $2,500 per year for each full-time student qualifying for the loans. The rising costs of dental education have resulted in sharply increased tuition fees. The cost of instruments and books increases yearly and, of course, the cost of living has also increased. It is not only important, therefore, that the major source of loan funds presently available to dental students be continued but the total appropriation and the maximum loan per student must be adjusted upward if we are to meet the rising costs of dental education.

In the 1965 Survey of Dental School Program Plans and Needs, dental school deans were asked to answer certain questions related to their experience with the health professions educational assistance student loan program under Public Law 88–129. Eighty-eight percent of the deans indicated that most of the applications for these loans were approved for amounts less than requested due to the necessity of distributing the available funds among as many dental students as possible. The average loan made to dental students was $950. Eighty-three percent of the deans reported considerable difficulty in meeting all loan requests. About one-quarter of the dental students enrolled at reporting schools received a loan under the auspices of this program and it was necessary to reject 18 percent of the loan applications, primarily due to lack of funds.

The association has recently conducted a study of the financial needs of dental students in cooperation with the Division of Dental Public Health and Resources of the Public Health Service. Although not yet published, preliminary tabulations from that study reveal some interesting observations which are related directly to problems of dental manpower. The study showed that 16 percent of the dental students found it necessary to interrupt their educational program between college and dental school and that 50 percent of this group were compelled to make this delay because of a lack of sufficient funds. The average period of interruption was 2.4 years, which means that with financial assistance 8 percent of the dental students might have entered dental school more than 2 years

earlier than they did. Therefore, for an entering clas of 3,800 students 304 (8 percent) might have had over 2 years added to their productive professional life if financial assistance had been available to them.

Additional arguments related to the need for increased financial aid for dental students are included in later portions of this testimony. The association would, however, like to record its full support of the student loan provisions of H.R. 3141 and urge the committee to provide a substantial increase in support for this important program.

BASIC AND SPECIAL IMPROVEMENT GRANTS

Part E of H.R. 3141, which would provide grants to improve the quality of schools of medicine, dentistry, and osteopathy, represents a most important and urgently needed expansion of the Health Professions Educational Assistance Act and is strongly endorsed by the American Association of Dental Schools. Although the ingredients which are essential to educational excellence are many and varied, there can be no doubt that adequate financial support and stability is an absolute requirement. As will be indicated later in this statement, education in dentistry is an increasingly expensive undertaking for any university and, indeed, some institutions may soon be confronted with the undesirable alternatives of either withdrawing from this field of professional education or tolerating an educational program which is of questionable quality. Neither in principle nor in reality can either of these alternatives be endorsed, thus every possible effort must be made to secure prompt and substantial financial assistance in the interest of our professional schools and the public which their graduates serve.

Before commenting on the specific provisions of H.R. 3141 which relate to the basic and special improvement grants, the association would like to request a clarification within this part of the proposed legislation. Although it is assumed that section 726 of Public Law 88–129, "Noninterference With Administration of Institutions," is intended to be applicable to parts E and F of H.R. 3141, there does not appear to be a specific provision to this effect in the legislation under consideration. In order that there be no doubt regarding noninterference with the personnel, curriculum, methods of instruction or administration of any institution which participates in the expanded programs proposed under H.R. 3141, the American Association of Dental Schools urges the committee to make it perfectly clear that section 726 of Public Law 88–129 does and will apply to both parts E and F of H.R. 3141.

Section 771. Basic improvement grants.—Although the quality of dental education in the United States today is unexcelled by that of any other country in the world, increasing costs and rapidly expanding enrollments necessitated by a burgeoning population make it imperative that we find additional assistance for our professional educational programs. As is well known to this committee, the principle of providing Federal assistance for various facets of higher education in this country has a long-established precedence. The concept of general public support for at least a part of the cost of educating the dentist in this country is equally well established, for the cost of dental education is not now, nor is it likely to be borne entirely by the student. Recognizing themselves as the recipients of the ultimate benefit of education for health professions, the public has assumed some responsibility for underwriting the cost of dental education through private donations, foundation support, and extensive appropriations by State legislators. The magnitude of this type of support is suggested in the fact that the operating expenditures of dental schools (excluding sponsored research programs) was in excess of $51 million last year.

In the 1965 survey of dental school program plans and needs conducted by this association, it was revealed that the total operating costs of the dental schools in the United States have more than trebled in the past 15 years (1949–64). This experience, typical of the spiraling cost of education for the health professions, has occurred in spite of the fact that undergraduate dental student enrollment in the same period of time has been increased by only 22 percent.

Dental schools accept as their two primary functions the education of dental personnel and the performance of dental research and other sponsored programs which enhance the teaching program and contribute to dental knowledge. These two functions, as has been emphasized many times by dental educators are inextricably related and the performance of each function is of vital concern to every dental school. Both must be supported adequately in the interest of national health.

Facts, however, point to an increasing imbalance between the support of sponsored and research programs and the teaching programs in dental schools. In the association's survey, it was revealed that support of research and other sponsored programs in dental schools has increased by a factor of 15 in the past 15 years while support for the teaching programs in the schools responding to the survey increased by a factor of only 2.6. Support for sponsored research programs is extremely important to the understanding and elimination or control of dental diseases and disorders and the proliferation of new knowledge which has resulted from the support of these programs is impressive. The Federal Government has played the largest single role in the support of these sponsored programs. The American Association of Dental Schools emphatically agrees, as has been demonstrated by its annual statements before the Appropriation Committees of Congress, that sponsored research programs must continue and expand in the public interest. The association, however, is equally convinced that increased support must be found for the teaching obligations of dental schools if the public is to receive full benefit of sponsored programs and if the quality of dental education is to continue and improve.

The rapidly expanding operating costs of dental schools can be illustrated by the following figures. In 1925, the total cost of the teaching program per enrolled dental student was $491, adjusted to 1964 dollars. Today, the operating cost per student is $3,693 and it is expected to rise to a conservatively estimated $5,284 by 1975. When the total operating cost, including sponsored programs, for the average dental school is computed, the cost per student in 1964 was $4,758. At the same time, as these costs have increased, the proportion of the cost borne by the student has decreased in an equally dramatic fashion. In 1925, the dental student paid for nearly one-half the cost of his education. By 1964, even though average tuition rates had quadrupled, the student paid for only one-quarter of the cost of his education. These costs per student are based on current realities. In the recent survey of dental school needs, deans of the Nation's dental schools indicated that an average operating expenditure of $6,620 per student would be necessary for the conduct of teaching programs which they felt would be desirable today.

Typically, the deficit between income and operating expense in dental schools is underwritten by the parent university. The relatively high cost of operating a dental school has resulted in some instances in a reluctance on the part of universities to consider the establishment of a new dental school even though there may be a demonstrated need for a new school in the geographic area. Basic improvement grants for dental teaching programs would, in the opinion of the association, lower this resistance and would facilitate implementation of the dental school construction provisions of H.R. 3141. Equally important, some of those institutions which have been in existence for decades may not be able to continue and expand the contributions which they have already made to the dental health of our people unless Federal assistance is made available.

In discussing the quality of any education, it is universally agreed that the ratio of teachers to students is extremely important. In dentistry, as in the other health professions, this ratio is particularly important due to the complexity of the basic knowledge and clinical skills to be assimilated by the student. In the 2-year period of dental education in which a student typically performs professional dental services with patients, this ratio becomes especially critical. Students require fairly constant supervision, evaluation, and guidance during this period and the quality of their education can be directly related to the availability of instructors to advise them. With the growth of student enrollment due to expanded facilities and the construction of new dental schools, the procurement of faculty will be perhaps the most serious single problem faced by dental school administrators. Without markedly increased financial support, this problem will be insoluble.

In 1950, the ratio of full-time equivalent clinical faculty members was 1 to 8.7 students. In 1964, this average ratio has been reduced to 1 faculty member to each 6.8 students but there are still institutions which, because of financial limitations, are compelled to operate with a ratio as high as 1 teacher to 15 students. As shown by the recent survey, the average in the schools with the most favorable ratio was 1 full-time clinical instructor to 4 students. In order to achieve this level in all of the dental schools, and thereby improve the quality of teaching, it would be necessary to secure approximately 1,400 additional clinical faculty members, an impossible task without additional financial support.

The lack of funds to secure full-time faculty has led many dental schools

to rely heavily upon the services of part-time faculty members, particularly in the clinical aspects of dental education. As essential as part-time clinical faculty members are, dental educators agree that the dental schools could and should improve the quality of their teaching programs by enlarging the number of full-time faculty members. In comparing a survey made in 1958 to the recent study conducted by the association, it appears that there has been little change in the ratio between full-time and part-time faculty members during the past 7 years, again, largely because funds simply are not available to employ highly qualified clinical teachers on a full-time basis.

The procurement of qualified dental faculty, of necessity, depends heavily upon the ability of the educational institution to offer financial incentives comparable to those available to practicing dentists. In dental education, because of lack of financial resources, it has not been possible to meet this objective. The average salary of a dental faculty member today is $13,500 as compared to an annual average income of more than $16,000 for the dental practitioner. The individual trained beyond the dental degree, as is the typical dental educator, can frequently command substantially more than the average dentist's income in specialty practice or fields of endeavor other than education. Based upon these observations, it seems clear to this association that the dental schools of the Nation and the American public would benefit from financial support which would make possible the employment of additional dental teachers.

In the 1965 survey of dental school program plans and needs, dental deans were asked to describe the kinds of programs they would instigate to improve dental teaching and the dental curriculum if funds were made available. The following is a partial tabulation of their responses:

	Percent of schools
Improvements or additional teaching programs desired:	
Additional in-service or preservice teacher education programs	44
Additional or improved programs in hospital dentistry educaton	44
Instruction in research methodology	36
Improvements in the teaching of coumunity, social, and preventive dentistry	81
Dental care for the special patients:	
1. Geriodontics and care for the chronically ill	39
2. Care for the homebound	19
3. Teaching of the team concept for the treatment of oral congenital anomalies such as cleft palate	25
4. Special teaching programs for maxillo-facial prosthesis	22
Improvement of educational media:	
1. Audiovisual equipment	6
2. Programed instruction	3

These, it should be emphasized, are only those activities to strengthen the dental curriculum which were mentioned with considerable frequency. Each of the additional programs or improvements in teaching programs listed above is in the obvious interest of increasing the quality of dental education and preparing the dental student to recognize and meet the increasingly complex dental needs of the public. Other improvments in the dental curriculum, such as special programs for the gifted dental student, should also be meutioned as necessary and desirable. It is worthy to note that 97 percent of the responding deans would inaugurate or strengthcu one or more of the problems ilsted ahove.

Reference has been made previously to the fact that the regular operating expenditure of the dental schools in 1964 was $51.1 million. However, when queried as to the amount of funds which would be required for operation at the level which they considered desirable, the deans of dental schools projected a current expenditure level of $81 million, with about $20.4 million of these funds needed for improvement of their present teaching programs and $9.6 million for the inauguration of new educational activities considered important to modern dental education. Although an increase in operating income of this magnitude will be impossible, this projection is cited to reemphasize the current financial plight of dental education—a circumstance which cannot but worsen as operating expenditures continue to climb and as enrollments increase.

The American Association of Dental Schools gives its strongest encouragement to the Committee on Interstate and Foreign Commerce to consider favorably section 771 of H.R. 3141.

Section 772—Special improvement grants.—As is undoubtedly true in all areas of higher education, the Nation's dental schools vary considerably in the amount of financial support which they have for the conduct of their educational programs, thus there is need for special measures to assist some institutions

achieving a desirable level of educational quality. The American Association of Dental Schools urges, therefore, that the special improvement grant authorization in H.R. 3141 be approved as an essential part of the program designed to strengthen and improve dental education in the United States.

In 1964, according to the recent survey conducted by the association, the average regular program cost for educating a dental student was $3,693 per year. This same survey revealed, however, that 1 school was able to invest less than $2,000 per student while 16 of the dental schools operated with an annual expenditure per student of less than $3,000. Although there is perhaps not a perfect correlation between cost of education per student and quality of education, there is unquestionably a sufficiently high degree of relationship to compel the conclusion that some of our dental schools simply do not have the financial resources to offer the quality of education that is desirable. This observation has been confirmed recently by action of the Council on Dental Education of the American Dental Association, the recognized accrediting agency for dental education, in which three dental schools have been placed on provisional accreditation, largely because of inadequacies which could be remedied by more adequate financial support.

As a general rule, it is well known that the financial support available to private institutions is below that given to State-supported schools. As indicated by the following figures, this situation exists in dental education. The average expenditure for education per student in privately supported institutions in 1964 was $3,263 compared to $4,180 per student in publicly supported schools. At the present time, 25 of the Nation's dental schools are in privately supported universities but it is clear that the private institution is finding it increasingly difficult to support the high cost of professional education. During the past 4 years, three privately supported dental schools have found it necessary to affiliate with State-supported institutions in order to achieve financial stability. It is significant also to point out that only two of the eight dental schools established since 1950 have been in privately supported institutions and one of these has since become State supported.

In terms of full-time clinical teacher-to-student ratios the Nation's publicly supported dental schools fare somewhat better than those which depend on private sources of revenue. The following table compiled from the association's 1965 survey illustrates this point and also shows that some institutions in both categories are conducting clinical educational programs with an extremely unfavorable faculty/student ratio.

Ratio of students to full-time clinical instructors (based on full-time equivalents)

Private schools (N=26)		Public schools (N=23)	
Students to faculty	Number of schools	Students to faculty	Number of schools
1 to 3	2	1 to 3	1
3 to 4	1	3 to 4	2
4 to 5	0	4 to 5	7
5 to 6	0	5 to 6	3
6 to 8	10	6 to 8	4
8 to 10	9	8 to 10	5
10 or more	3	10 or more	1
Median: 7.8		Median: 5.2	
Range: 1.5 to 14.9		Range: 2.8 to 10.3	

Most of the figures which have been presented thus far in this section refer to present levels of operating expenditures which, it should again be emphasized, are by no means adequate. As has been indicated previously, the deans of dental schools reported earlier this year a need for increasing the annual expenditure per student from an average of about $3,700 to more than $6,600 in order to improve the quality of the regular educational programs and to add to the curriculum those activities which are deemed desirable for present-day dental education. In this regard, the association would like to mention again the increasing educational burden which the dental schools are being called upon to bear. Continuing education programs for dental practitioners are more and

more centered in the deutal schools. The demand of the public for additional speciaity practitioners requires expanded programs of advanced education.

The dental schools have an ever-broadening responsibility for providing educational opportunities and consultation for the dental hygienist, dental assistant, and dental laboratory technician. These additional commitments place greater strain on the already limited financial resources of the dental schools and will, unless increased support can be found, inevitably lead either to further dilution of the quality of the educational program for dentists or to neglect of several other important obligations of our dental educational institutions.

SCHOLARSHIP GRANTS FOR DENTAL STUDENTS

A final, and very essential, provision of H.R. 3141 is that relating to scholarship grants to schools of dentistry, medicine, aud osteopathy. Before commenting on the need for this type of financial assistance for deutal students, the association would like to make a suggestion for the consideration of the Committee. Education for the health professions is, both in level and scope, a graduate discipline within the university. In addition, there can be little disagreement with the proposition that manpower in the health professions is as essential to the welfare and security of our country as is the scientific maupower required in the physical aud life sciences. Through various national agencies, the Federal Government has long- and well-established programs of support for fellowships iu many graduate study disciplines—programs which have contributed substantially and importantly to the progress of the country. The American Association of Dental Schools believes that the proposed scholarship program for studeuts in the health professions is comparable, in concept and in need, to the fellowship programs which have been supported for many years by the Federal Government and urges, therefore, that part F of H.R. 3141 be amended to refer to "Fellowships" for students of dentistry, medicine, and osteopathy rather than "Scholarships."

An examination of sources of funds used to finance deutal education reveals that the student and his family bear the major share of the cost with only about 3 percent of the cost being provided through some kind of nonrepayable income. This is in direct contrast to the experience of graduate students in nonprofessional schools where the great majority of students are supported by nonrepayable grants. As an example, more than 80 percent of graduate life science students receive grants averaging $2,700 per year while only 15 percent of the dental students receive awards averaging $425. Thus, the dental student, with generally higher fees to pay and with a curriculum which makes part-time employment comparatively difficult, has much less opportunity for financial support.

This comparison of nonrepayable support available to dental students with that available to graduate student in other scientific disciplines is extremely important. Increased demands for persons with graduate training have resulted in the creation of many new graduate programs as well as expansion in existing programs. The establishment of National Defense Education Act programs to provide college teachers in critical areas is a good case in point. As graduate programs have increased, the student with outstanding ability has become the object of vigorous recruitment efforts. Students with the best scores on graduate record examinations can anticipate a choice of several programs in their field of interest; each offering stipends, fee waivers, and allowances for dependents. In contrast, the student interested in a health profession can expect only limited help. There is unquestionably a need for fellowship support in the physical and life sciences, as the Congress has already recognized. There is, the association believes, also a need for support in the health sciences if we are to assure the continued progress and growth of the health professions.

Fortunately, in terms of quantity of applicants, the situation in dental education has improved in the past 3 years. The ratio of applicants to accepted students has risen from a low of 1.6 to 1 in 1961–62 to the present level of 2.4 to 1. Dental educators are convinced that this more favorable ratio had had a beneficial effect on the quality of students accepted for dental education. Educators are concerned, however, that this improved ratio might be diminished as the cost of dental education continues to increase and as the competition from other scientific disciplines expands. If we are to increase the number of dental school positions available by twofold by 1975, as it is hoped, the number of dental school applicants will need to increase by at least the same ratio by the

time. Without corresponding increases in dental school applicants, the ratio to accepted students would drop below the 1961–62 level.

Continued progress in the fight against dental disease will be related to the extent to which students of exceptional ability are attracted to dental research and dental education. The applicant who can be expected to make a contribution as a dental research scientist or as a dental educator will normally have had several opportunities for substantial or complete support of his graduate training in the life sciences. Dentistry, of course, benefits from many discoveries which are made in the purely physical or biological sciences. However, for the ultimate benefit of dental education and dental research, dentistry must be in a position to compete for these highly qualified individuals. Once they have acquired a dental education, they frequently continue their education beyond the dental degree and return to teach or perform research in the field of dentistry. At the present, however, dentistry has little incentive to offer the superior candidate in comparison to the fellowships available to him in other sciences.

Because a dental education must usually be supported heavily from family resources, it is frequently restricted to students from middle- or upper-income families. As an example, in 1963 when only 4.8 percent of all the families in the United States had incomes of $15,000 per year or more, 22 percent of all dental students were from families belonging to this group. Similarly, whereas 29.1 percent of the families in the United States had annual incomes of less than $4,000 per year, only 11.7 percent of dental students were from families belonging to this group. Surely in a nation as affluent as our own, an effort can and should be made to make educational opportunity available to our finest minds without restrictions based upon economic considerations.

In summary, the American Association of Dental Schools is convinced that part F of H.R. 3141 is extremely important to dentistry and to the other health professions. Fellowship aid in keeping with that available in the life sciences needs to be made available to the dental student. The association is convinced that the availability of fellowship aid will have a significant effect on both the quality and quantity of the dental school applicant and will provide opportunities for the qualified applicant who, for economic reasons, could not otherwise pursue a dental education.

CONCLUSION

The American Association of Dental Schools is deeply appreciative of this opportunity to comment in support of the provisions of H.R. 3141. The association views as vital the provisions to extend and expand programs of dental school construction and expansion and the extension of the dental student loan program. In addition, the provision of basic and special improvement grants for dental schools and the establishment of fellowship programs for dental students will provide benefits to the Nation's citizens far beyond the cost of such programs. The association urges the Committee on Interstate and Foreign Commerce to give prompt and favorable support to each of the provisions of the Health Professions Educational Assistance Amendments of 1965.

The CHAIRMAN. And you may make any additional supplemental statement that you might desire.

Dr. BURKET. Thank you.

In 1963, when dental witnesses had the privilege of coming before this committee to discuss the legislation that led to Public Law 88–129, they said:

> This measure is aimed at relieving what is probably the most critical problem in the health field today: the impending shortage of health personnel.

THE CONSTRUCTION PHASE OF THE PROGRAM

Public 88–129 has done much to help meet these needs. Under the law thus far, nine dental schools have been funded. One is a totally new school, six are engaged in major expansion and substantial replacement of facilities, and two are involved in less major renovation. Some 300 new, first-year places are being provided.

Additionally, there are 16 other applications either having been received or will be received prior to the June 30 filing deadline.

In total, then, 25 dental applications have been or will be filed. If approved and funded, these would provide from 700 to 730 new, first-year places.

In fact, however, no more than half of these applications can be funded under the existing authorization, despite the fact that all are well planned and badly needed. Under the present law, $43.75 million is available to dental school. To fund these applications would require some $84 million. Thus a deficit of $42 million exists already just in relation to applications on hand or expected before June 30.

Such a backlog is not too surprising since the need for Federal Assistance in this area is of long standing. Our association, as did others, petitioned Congress for many years prior to the passage of Public Law 88–129. No one knows this better than the chairman of this committee, for it was his strong and consistent leadership as much as anyone's which made enactment finally possible.

But, because the accumulated need was so great, it was to be expected that an immediate and sharp demand would be evident as soon as funds became available. This makes it all the clearer that we must persist in our efforts for the foreseeable future.

H.R. 3141 calls for a 5-year extension of Public Law 88–129. We believe that such a time limit is desirable in that it both satisfies the need for continuity and recognizes Congress right to periodic review.

A brief survey of available projections makes it apparent how essential continuation is. There are presently 105,000 dentists in the United States, representing a ratio of approximately 1 to 1,900. To maintain this ratio we will need by 1980, approximately 139,000 dentists.

If current rates of dental graduates remain constant, however, we will fall short of maintaining this ratio by more than 10,000 dentists. And this is a most conservative estimate since it makes no allowance whatever for increased demand for health services.

The American Dental Association believes that section 720 of Public Law 88–129 should be extended in such a way as to give us the realistic hope of eliminating this impending deficit.

We believe this could be done if Congress would allocate $25 million a year in category 2 funds and $35 million a year in category 3. On this basis, dentistry would have available to it some $33.75 million annually. This total is arrived at by adding the category 2 funds to the $8.75 million that represents dentistry's share of category 3. Under the current procedures, dentistry has been receiving one-fourth of category 3 funds. We believe this to be an equitable division and assume it will continue.

Also in regard to the construction section of the law, the association believes the committee should add an amendment allowing for moderate and carefully controlled amounts of planning money. Institutions such as we are discussing are expensive to build. Dental schools can cost $10 million or more. Planning ahead gives us the best possibility of using funds efficiently and conservatively. If in making such an authorization available, the committee would do so on the basis of matching funds—perhaps one to one—this would discourage a State institution from applying for the planning funds until such time as it is certain to proceed with the project.

Finally, the association would like to take this opportunity to commend publicly the administration of this section of the law by the Public Health Service's Division of Dental Public Health and Resources. Its work, in our opinion, has been expert, efficient, and thoroughly in compliance with congressional intent.

ON THE QUESTION OF LOANS

The American Dental Association would also urge the extension of the student loan program. Thus far, under the law, some $18 million has been distributed to 147 health profession schools with a total enrollment of nearly 49,000. Forty-six dental schools are included among this total for a total loan number of 3 million. This has been provided to students for an average loan fund of $950.

Professional education is an expensive process. In regard to dentistry, when you total the cost involved in undergraduate education, dental school itself and the establishment of an office, you arrive at a sum nearing $35,000.

When you consider this in light of the fact that the median family income is less than $7,000 a year, it is obvious that either we must offer financial assistance to students or candidly admit that only the wealthy can send their children to dental school. Surely we can all agree that this latter alternative is undesirable.

Recently surveys taken on the subject bring the following facts to light:

In 1962–63, 32 percent of the Nation's dental students received loans. An additional 23 percent reported the need for assistance but were unable to obtain it.

Nearly 2 out of every 10 dental students report an interruption in their education between college and dental school giving, as often as not, the reason that they had exhausted their financial resources. The average interruption is 2.4 years.

Seventy percent of the dental students are forced to hold full-or part-time jobs during the school year, during dental school.

In regard to dental schools alone, it is our information that this year some 5,500 students were identified as being in need of assistance, with the total amount required exceeding $7 million.

With this in mind, the association would recommend that Congress extend the loan section of Public Law 88–129 to the extent that in each year the dental schools of the Nation will have available from it some $7 million a year.

The association also believes that the provision of H.R. 3141 increasing the annual maximum loan per student to $2,500 is desirable. Such a change recognizes the fact of heavy costs and also keeps the program comparable to loans available to graduate and professional students under the National Defense Education Act.

Speaking now to new programs under the Public Law 80–129 which are proposed in H.R. 3141:

In addition to providing for extension of the construction and loan sections of Public Law 88–129, H.R. 3141 would establish grants to schools. The American Dental Association supports enactment of both of these programs. Dr. Mann, representing the American Association of Dental Schools, will discuss these proposals in depth and we

do not wish to anticipate what he has to say. We would, however, like to make the following brief points:

In regard to scholarships, it should be clear that this is not a device for merely increasing the assistance available to present dental students. Even under the loan program, there are those whose resources are such that the costs alluded to earlier remain powerfully inhibiting. It should also be kept in mind that, at present, 88 percent of the dental students from lower income families graduate with an average debt of $9,000. Scholarships would do much to mitigate this undesirable situation.

Second, provision of scholarships would do much to improve the competitive position of the health professions in attracting the best talent. When it comes time for a young man of scientific talent and bent to make a career decision today, he will find that if he chooses one of the life sciences, there is considerable opportunity for him to receive fellowships. For example, a recent survey showed that 80 percent of the life science graduates students received some form of nonrefundable support averaging $2,700; by comparison to dental students the comparable figures are 19 percent and $430.

What is being asked is the establishment of a similar fellowship effort for the health professions. The bill refers to them as scholarships, but in point of fact they are indistinguishable from what are often defined as fellowships.

In regard to the provision of operating grants, the association believes the following figures demonstrate the need for this assistance:

In 1949, the operating expenses of the Nation's dental schools averaged $500,000. In 1964, they averaged $1.4 million. This represents an increase of 300 percent in 15 years.

The per student expenditures, over the same span, has more than doubled, from $1,800 to $3,700.

However, the portion of the total cost met by the student's payment has decreased through the years from about 50 percent in 1924 to about 33 percent in 1949 to about 26 percent at the present time.

Every expert estimate indicates that expenditures will increase in coming years. By 1974, the present per student expenditure of $3,700 will have risen to $5,300.

All of this, of course, is the opposite side of the coin from the remarkable progress in preventing and controlling disease that has been made in recent years. If we are to maintain and better that rate of improvement of the Nation's health, operating assistance to the dental schools is necessary. The grants proposed by H.R. 3141 would offer such assistance and should be approved.

In relation to this section, there is one cautionary statement the association would like to make.

We realize that there is no intent in the language of H.R. 3141 to change the long-standing policy that leaves with the school the right to be sole judge of curriculum, teaching personnel, and other aspects of the education process. In order to make this important point crystal clear, however, the association believes that the committee should make section 726 of Public Law 88–129 applicable to all of title VII of the Public Health Service Act.

Finally, the association notes that H.R. 3141 would establish a second advisory counsel to assist the Surgeon General in administering Public

Law 88–129. While not wishing to hobble the administration of this law in any way, we do believe such duplication is unnecessary.

And now with your permission, Mr. Chairman, I would like to ask Dr. Mann to complete this joint presentation.

The CHAIRMAN. Dr. Mann, you may proceed.

Dr. MANN. Mr. Chairman, first I would like to say that we are happy to have this opportunity to testify for the American Association of Dental Schools, and as Dr. Burket indicated earlier we wish to submit a formal statement for the record.

We do at this time, however, simply wish to give briefly some testimony on the major portions of the bill.

In general, we concur with the comments of Dr. Burket.

Insofar as construction is concerned, as Dr. Burket has indicated, the impact of the current program under Public Law 129 is that 9 construction plans have been approved and funded to provide 300 new freshmen places in the dental schools of the country; 11 other applications are on file and from 5 to 6 more are expected before the deadline of June 30 for funding under the present legislation. These would add 400 more freshman positions.

But among these 25 or 26 applications about $86 million in Federal funds will be requested and only $44 million is available from Public Law 129. Therefore, a backlog of $42 million can already be anticipated by the time the current legislation expires.

I think the committee will be interested that in 1965 the American Association of Dental Schools conducted a survey of dental school program plans and needs, and this survey indicated that dental deans and other university officials anticipated that if funds could be made available there would be total replacement and expansion of the facilities of 23 dental schools, there would be additions for renovations for 19 other dental schools, and there would perhaps be construction of 11 new dental schools throughout the country. This would provide an increase in enrollment of 1,250 new students by 1975 in addition to those 450 already anticipated under Public Law 129. This would require an estimated expenditure of $288 million and a Federal share of $157 million.

Now, based on these backlogs and the need for additional educational facilities, the American Association of Dental Schools recommends that the minimum of $25 million be provided for dental school construction and expansion in each year covered by H.R. 3141.

Insofar as replacement and rehabilitation of the existing facilities is concerned, we would like to emphasize that the present pattern which was brought about through administrative agreement and which allows dental schools one-quarter of the funds for rehabilitation for all health professions is most satisfactory to the association.

Under Public Law 129 this resulted in $8¾ million for dental schools. The association believes this is realistic and urges the extension of this pattern under H.R. 3141.

It is recommended that a minimum authorization of $35 million per year be approved for rehabilitation or renovation of health profession education institutions included in the legislation.

We would like to close our comments on the construction portion of the bill by expressing commendation to the Division of Dental Public Health and Resources and the dental review panel for the

efficient operation and administration of Public Law 129 since its inception. They developed the program in a short period of time and have administered it equitably and effectively.

We also would like to compliment this committee for holding the hearings at this time and thus indicating your interest in continuing this legislation without interruption if possible. We feel this very particularly because there is a great amount of planning that has gone into the applications which I have referred to earlier. Much of it is still underway and it should not be discontinued if at all possible by interruption of the legislation.

To go to the loan program, in order to conserve the committee's time, I would like to say only that we support the statement of Dr. Burket, and we would be happy to answer any questions should the committee have them.

To move on the basic and special improvement grants, it is our belief that adequate financial support is an absolute requirement for educational excellence. This is especially true in dentistry. We recognize that many dental schools and deans are doing an outstanding job with limited funds. They have devoted faculty people but they are encountering financial problems due to the rising costs of all forms of higher education and particularly dental education.

I think all dental schools and their deans recognize the need to add additional programs that might not have been necessary 10 or 15 years ago but which now are important portions of this complex which we call dental education.

I think all dental schools need more teachers than they now have. They need better teaching. They need more time from the teachers that they do have, for I believe the committee probably recognizes that many of our teachers are also part-time practitioners. They need to spend more time in developing the so-called health team approach to the practice of dentistry, and this involves training of auxiliary personnel as well as dental students.

It is necessary, more and more, for dental schools to develop graduate programs to educate specialists, teachers, researchers. They are required to conduct programs of continuing education to keep the practitioners abreast of the recent developments in the profession.

And, all in all, dental education, as I indicated a moment ago, is becoming more and more complex and more and more expensive.

With these rising costs and expanded enrollments some universities may be forced to withdraw from dental education or to tolerate educational programs of questionable quality if they cannot obtain assistance of some sort.

As I know you all understand, the support of dental education comes about through university funds, student fees, donations, gifts from foundations and State appropriations and various mixtures in the various schools.

The last year dental schools spend more than $51 million on their regular programs or needs on operational budgets, and this was other than the $15 million that was spent for sponsored research programs.

As I am sure the committee agrees, health manpower personnel is a national asset and necessity and therefore it would appear that the Federal Government should logically extend the policy recognized by Public Law 129 and should participate in support of the operational budget.

This bill which we are considering would provide a little more than $4 million the first year which would be for this purpose which would be approximately 8 percent of the expenditures of the dental schools last year in their own operational budget.

The basic improvement grants would help remedy the teacher-student ratios which influence the quality of education. In most schools these ratios are not adequate. With the growth of enrollment the teacher shortage will become critical.

The average full-time equivalent clinical faculty to student ratio and dental schools today is 1 teacher to 6.8 students. The average of the schools surveyed in 1965 indicated that the ratio which was considered desirable by this average school, so to speak, was 1 to 2–4 students. In order to achieve this ratio in all dental schools we would need 1,400 new clinical faculty members, and this would be impossible to achieve without financial support.

Insofar as salaries of faculty members is concerned, the average dental faculty member is paid $13,500 per year as contrasted to substantially higher compensation for both general practitioners and specialty practitioners. In 1963 the average income of all nonsalaried dentists was $16,000; in that same year the average specialist had an income of $24,500 and probably most of our teachers should be compared to specialists since they are qualified in that fashion with more than the usual education. Therefore, their salaries fall far below that of the specialist to whom we should be comparing them.

What improvements would the schools make besides those mentioned in teaching now if funds were available? There are a variety of improvements and/or additional programs which are to be considered by schools.

One is to increase teaching through additional inservice or preservice teacher education programs. There would be an additional or improved program in education in hospital dentistry. There would be increased instruction in research methodology. There would be improvement in the teaching of community or social or preventive dentistry, whichever term may be most understandable. It is the teaching of dental students to assume more responsibilities for the health of those within their community. There would be more training of dental students to provide dental care for special patients such as the aged and infirm, and those with special problems such as lip pallet for those that require extensive maximal facial processes due to traumatic injuries to face or because of oral cancer.

It would permit improvement of education through media such as audiovisual equipment and programed instruction. There would be development of special programs of gifted dental students.

These are all items that are needed to maintain basic educational standards of our dental school.

The dental deans have indicated that they would use, if it were available, $9.6 million for the inauguration of these new activities. While this objective is not possible even under H.R. 3141 the association urges the committee's endorsement of basic improvement grants for all dental schools.

As far as special improvement grants are concerned we have already indicated that all schools have a need for help there with their operational budgets, so the basic grants are of great importance, and these will bring about an across-the-board improvement in dental education.

However, as the bill wisely recognizes in our judgment there is a wide variation in the amount of support available for dental schools and the special improvement grants will serve a great purpose in helping some of the underfinanced schools. It will help them to achieve prevailing standards of dental education and will make a significant contribution to the dental health of the people of our country.

The special improvement grants would also help some of the better schools to develop model departments and demonstration projects, and this would help to provide leadership in dental education and it would assist all schools.

It is just as important in our view to help the pace setters as to help the underfinanced schools.

So, in conclusion regarding this section, the association urges approval of the special improvement grants section to insure that the quality and every dental school meets with the standards of true educational excellence.

The American Association of Dental School also urges the committee to insure that language regarding noninterference with administration included in Public Law 129 be made specifically applicable to the basic and special improvement grant sections of the bill.

Lastly, if we may move to scholarship grants for dental students, dental education in our view is truly graduate education. The Federal Government has in the past extended fellowship support to many varieties of graduate education.

This association believes the proposed scholarship section for health professional students is comparable in concept and need to other fellowship programs and urges the committee to amend H.R. 3141 to refer to fellowships rather than scholarships.

I would also like to say that we do not consider loans and scholarships as equivalent. Many students can be helped through education if they had the basic financial wherewithal and the loans can help them through their education. But with some poorer students, some who are qualified obviously but who have lack of adequate funds, they need some nonrefundable assistance in addition to what they can obtain from loan funds in order to contemplate the professional education as expensive as that of dentistry.

Only 15 percent of the dental students now receive nonrepayable awards and these average $425 per year. In contrast, more than 80 percent of graduate life science students receive awards averaging $2,700 per year. The superior student considering graduate study receives many offers for financial support and dentistry needs some of these superior students for the advancement of dental research and dental education. It presently has little possibility in terms of financial assistance to compete with other graduate disciplines.

The pursuit of dental education is frequently restricted to students from middle- or upper middle income families and in a nation as affluent as our own every effort should be made to make educational opportunities available to our finest minds without restrictions based on economic considerations.

Therefore the American Association of Dental Schools believes that financial support in keeping with that available in the life sciences needs to be made available to dental students and urges the committee to consider this provision of H.R. 3141 favorably.

Thank you, Mr. Chairman.

The CHAIRMAN. Doctor, thank you very much, and your statement in full may be included in the record as submitted.

Any questions by a member?

The committee will be in recess until 1:45 at which time we will come back and Dr. MacBain will be the next witness.

(Whereupon at 12:25 p.m., Wednesday, June 9, 1965, the committee recessed, to reconvene at 1:45 p.m., the same day.)

AFTERNOON SESSION

The CHAIRMAN. The committee will come to order.

Dr. R. N. MacBain.

Dr. MacBain, I believe you are the president of the Chicago College of Osteopathy appearing on behalf of the American Osteopathic Association.

STATEMENT OF DR. RICHARD N. MacBAIN, PRESIDENT, CHICAGO COLLEGE OF OSTEOPATHY; ACCOMPANIED BY LAWRENCE L. GOURLEY, WASHINGTON COUNSEL OF THE AMERICAN OSTEOPATHIC ASSOCIATION

Dr. MACBAIN. Yes, Mr. Chairman. With me is Mr. Lawrence Gurley, Washington counsel of the American Osteopathic Association.

To conserve the time of the committee, I would like to abbreviate my statement and file the complete statement with the reporter.

The CHAIRMAN. You may file the statement. It will be included in the record and you may make supplementary remarks.

Dr. MACBAIN. Mr. Chairman, members of the committee, I am Dr. Richard N. MacBain. I have been president of the Chicago College of Osteopathy since 1939. The college dates back to 1902.

There are five colleges of osteopathy and surgery. All are nonprofit, tax-exempt institutions. All are accredited by the American Osteopathic Association, and all are members of the American Association of Osteopathic Colleges.

The impact of the osteopathic colleges is national in scope. Their current student body is derived from 46 States and the District of Columbia. Their graduates are engaged in the legalized practice of their profession in each of the 50 States and the District of Columbia.

A statistical study of the osteopathic profession compiled by the American Osteopathic Association shows that as of December 31, 1964, there were 11,654 active osteopathic physicians in the United States, 9,835, or 83.3 percent, of whom hold licenses conferring unlimited practice rights in their present location.

As stated in House Report 109 on the Health Professions Educational Assistance Act of 1963, in most sections of the United States doctors of osteopathy are licensed under the same provisions as doctors of medicine.

It is an honor to appear before this subcommittee on behalf of the American Osteopathic Association and the American Association of Osteopathic Colleges in support of H.R. 3141 amending the Health Professions Educational Assistance Act of 1963, Public Law 88–129, which extends the act and adds provisions for grants to assist medical, dental and osteopathic schools to improve the quality of their educa-

tional programs, and for grants to these colleges for award of scholarships.

We are interested in all of the provisions of this bill and we consider them of great importance to our colleges and to meeting, helping to meet the needs for more health manpower that have been detailed by other witnesses.

In advocating a program of extension and expansion such as that incorporated in H.R. 3141, the President's Commission on Heart Disease, Cancer, and Stroke in its report to the President last December, stated that the physician supply is beyond question the most critical single element in manpower for medical services, and said:

> About 7,700 physicians graduated from the Nation's 87 medical and 5 osteopathic schools in 1964. We must be able to graduate an additional 1,000 per year, starting now, to keep pace with the population growth. Present trends, including the 12 to 15 new medical schools in various stages of development plus anticipated expansions of existing schools, will yield approximately 9,000 per year by 1975 and fewer than that in the intervening years.

The Commission's Subcommittee on Manpower, as included in the report, pointed out that:

> As of December 31, 1963, 13 States and the District of Columbia had at least 1 physician in private practice for every 1,000 in the civilian population. Assuming that this ratio is a reasonable measure of need for the remaining 37 States, it is estimated that there is a shortage of 20,000 physicians for private practice at the present time. Were we able to expand the output of the Nation's medical and osteopathic schools by 25 percent immediately, it would require 10 years to make up this deficit alone.

The bill extends the grants for construction program of the act from June 30, 1966, to June 30, 1971. Each of the osteopathic colleges filed letters of intent to apply for participation in this program, and each is still engrossed in overall plans for meeting the necessary architectural and financial requirements. Most of them would not be able to qualify unless the proposed extension of the program is granted.

We at the Chicago College found that the application called for much detailed material than first understood, hence it has taken longer than expected. The architect's schematic drawings are now under discussion with the grant administrators. We expect to obtain final commitment on matching funds, primarily loans, by June 15, and we hope to submit our application by June 30.

The loan features of this bill are particularly important. We feel that the current act has made a great deal of difference in the ability of many of our students to continue their education, and we are heartily in favor of the new provisions and hope that the necessary appropriations will be made.

That has been one of the difficulties in the loan program, that the expectations of some students were not met because the appropriations fell short of what the program was outlined to do.

The basic improvements section of this bill will enable the osteopathic colleges to greatly increase the quality of their educational program. We want to increase as rapidly as possible the student-faculty ratio which in our colleges at present is in the neighborhood of between 1 to 5 to 1 to 3½.

We would like to improve this ratio. We would like to engage the services of more full-time faculty members so that we can carry

on a broader program of research, and improve that general plan of instruction in our colleges generally. Our schools do not have any State assistance with the exception of the Philadelphia College of Osteopathy.

The State of Pennsylvania has no medical school in the State university, and it subsidizes the seven medical schools and the one osteopathic college in the State. Except for that, there are no State funds available to any of the other osteopathic colleges because in the States where they are located it is not the policy of the State government to give support to any medical or osteopathic schools other than those operated by the State university.

The special grant under the basic improvement section will be highly important for bringing up weak areas in the curriculum which I am sure we share with all other colleges in some degree.

The scholarship program is also of great importance in helping many students who would even be afraid of undertaking the obligations of the loans with the limited resources that they have to begin their education, and the straitened circumstances of many families from which they come.

The proposed scholarships will help to prevent the siphoning off of high-quality students that would otherwise be attracted to other fields where Federal scholarships are available. This might be particularly true of high school students planning their careers. The road to becoming a physician is long, arduous, and expensive.

That, Mr. Chairman, in brief is our comment. We would heartily endorse every section of this bill.

Thank you for the opportunity to appear before you.

(Prepared statement of Dr. MacBain follows:)

STATEMENT OF THE AMERICAN OSTEOPATHIC ASSOCIATION

Mr. Chairman, members of the committee, I am Dr. Richard N. MacBain. I have been president of the Chicago College of Osteopathy since 1939. The college dates back to 1902.

There are five colleges of osteopathy and surgery. All are nonprofit, tax-exempt institutions. All are accredited by the American Osteopathic Association, and all are members of the American Association of Osteopathic Colleges.

The impact of the osteopathic colleges is national in scope. Their current student body is derived from 46 States and the District of Columbia. Their graduates are engaged in the legalized practice of their profession in each of the 50 States and the District of Columbia. A statistical study of the osteopathic profession compiled by the American Osteopathic Association shows that as of December 31, 1964, there were 11,654 active osteopathic physicians in the United States, 9,835 or 83.3 percent of whom hold licenses conferring unlimited practice rights in their present location. As stated in House Report No. 109 on the Health Professions Educational Assistance Act of 1963, in most sections of the United States, doctors of osteopathy are licensed under the same provisions as doctors of medicine.

It is an honor to appear before this subcommittee on behalf of the American Osteopathic Association and the American Association of Osteopathic Colleges in support of the pending Health Professions Educational Assistance Amendments of 1965, H.R. 3141.

The bill amends and extends the construction and student loan features of the Health Professions Educational Assistance Act of 1963, Public Law 88-129, and adds provisions for grants to assist medical, dental, and osteopathic schools to improve the quality of their educational programs, and grants to these colleges for award of scholarships.

In advocating a program of extension and expansion such as that incorporated in H.R. 3141, the President's Commission on Heart Disease, Cancer and Stroke in its report to the President last December, stated that the physician supply is

beyond question the most critical single element in manpower for medical services, and said:

"About 7,700 physicians graduated from the Nation's 87 medical and 5 osteopathic schools in 1964. We must be able to graduate an additional 1,000 per year, starting now, to keep pace with population growth. Present trends, including the 12 to 15 new medical schools in various stages of development plus anticipated expansions of existing schools, will yield approximately 9,000 per year by 1975 and fewer than that in the intervening years."

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We at the Chicago college found that the application called for much more detailed material than first understood, hence it has taken longer than expected. The architect's schematic drawings are now under discussion with the grant administrators. We expect to obtain final commitment on matching funds, primarily loans, by June 15, and we hope to submit our application by June 30.

The bill extends the student loan provisions of the act for 5 years to June 30, 1971, raises the individual loan ceiling from $2,000 to $2,500, and removes the ceiling on appropriations.

The demand for these loans has far exceeded the funds available for allotment under this program. The proposed amendments should be helpful, providing adequate appropriations are made available.

In addition to the funds available under this program, the Student Loan Fund Committee of the American Osteopathic Association makes loans to juniors and seniors. During the year 1963–64 the committee made 132 loans in the amount of $750 each. These loans bear 3 percent interest and are repayable 3 years after graduation, unless extended. Average repayment period has been 5 years. Loans require a cosigner with bank reference.

This bill authorizes a new program of basic improvement grants and special improvement grants to medical, dental, and osteopathic schools to be used by the schools for the improvement of the quality of their educational programs. The basic improvement grants for fiscal year 1966 would amount to $12,500 to each school plus $250 per full-time student, and for each of the next 4 years the grant would amount to $25,000 for each school plus $500 per full-time student. Upon a showing that the applicant school needs additional financial assistance in order to strengthen its curriculum or to improve the quality of its education, the Surgeon General would be authorized to make special improvement grants within limits prescribed in the bill.

The only osteopathic college which receives State assistance for operation and maintenance is the Philadelphia College of Osteopathy. Pennsylvania has no State medical school and instead subsidizes the seven private nonprofit medical schools including PCO which are located in the State. For the year 1964–65, the allotment to PCO is $583,200, which is about 45 percent of the school budget of $1,300,000.

Two of our schools are located in Missouri; namely, the Kirksville College of Osteopathy & Surgery and the Kansas City College of Osteopathy and Surgery. The president of the Kirksville college states that conditional provisions in that State prevent operational appropriations for non-State-owned institutions. He says that efforts are being generated to change these provisions as they apply to schools and colleges in the health fields, but that it is anticipated that this will require many years of effort and cannot become available in time to meet present urgent problems. The president of the College of Osteopathic Medicine & Surgery at Des Moines reports a similar situation in that State. There are no provisions for operational funds or student loans for privately operated schools of medicine in the State of Illinois. We have one State-owned medical

school, the University of Illinois, and four privately operated medical schools and one osteopathic college. None of the latter five is eligible for any State help and it is questionable if any will be forthcoming in the foreseeable future. The only possibility of this college getting such help would be if a concerted drive were made by the much more politically powerful schools of medicine.

Last year the Chicago College of Osteopathy spent $840,079.21 entirely for the training of doctors. This was made up from: tuition, $256,192.57; professional fees, $154,489.25; Public Health Service grants for research and for training in heart, cancer, and mental health, and grants for work-study under the Economic Opportunity Act, $275,533; miscellaneous, $16,477.29; total, $702,692.11, leaving a deficit of $137,387.10. This deficit was covered from hospital operations and from gifts. The college hospital has 167 beds, and affiliated teaching hospitals in Detroit provide an additional 385 beds.

Our student-faculty ratio is 4.6. We could use an additional 25 members which, when added to our current 55-member faculty, would permit necessary additional time for research. An important drawback to enticement of additional qualified faculty members is lack of space. We are already operating in very cramped quarters. In the 1964 Public Health Service brochure entitled "Medical Education Facilities Planning Considerations and Architectural Guide" occurs the following:

"One of the most important factors affecting medical school space needs is the size and character of the full-time faculty. Marked variation exists in the number of such faculty at schools now in operation, as well as in the kind of accommodations—particularly research laboratories—provided for them.

"The above-mentioned Commission's Subcommittee on Manpower put it this way:

"When considering ways in which medical schools can best be helped to increase the number and quality of the Nation's physicians, it is apparent that different schools have very different problems. Some of the newer and some of the impoverished schools badly need full-time faculty in larger numbers."

In passing on applications for college improvement grants, the Surgeon General is required to consult with a National Advisory Council on Medical and Dental Education. This Council is to consist of the Surgeon General as Chairman and 12 members, at least 3 of whom would be selected from the general public and the remainder from among "leading authorities in the fields of medical and of dental education, respectively." We assume that the field of medical education as so referred to is intended to include medical and osteopathic authorities, and, therefore, that osteopathic representation on the Council would be constant. If there is any doubt that such is the understanding, then we respectively request the necessary clarification to assure osteopathic membership.

The words "and osteopaths", lines 18–19, page 6, of the bill should be deleted as redundant. Throughout the Health Professions Educational Assistance Act the term "physician" includes doctors of medicine and doctors of osteopathy, and this format should not be changed.

The bill authorizes scholarship grants to schools of medicine, osteopathy, or dentistry for scholarships to be awarded annually by the schools, for the fiscal year 1966 in the amount of $2,000 multiplied by one-tenth of the number of full-time first-year students, and continuing for succeeding fiscal years until as much as 10 percent of the entire student body is awarded scholarships, with a cutoff date of June 30, 1973, the awards to be made particularly to students from low-income families and applied to the student's tuition, fees, books, equipment, and living expenses at the school making the award.

In 1960 the State of Florida established a $1,000 a year scholarship for a resident who has been selected for admission by any approved osteopathic college.

In 1964 the State of New York established a $50,000 scholarship fund for New York students contemplating the study of osteopathic medicine.

In the spring of 1964, 10 scholarships of $1,500 each were awarded by the auxiliary of the American Osteopathic Association to students entering osteopathic colleges in 1964. Several State associations award scholarships in small amounts, and a few memorial scholarships are made available.

While these State and private scholarships are important, their overall aggregate is not substantial.

We think the proposed scholarships will help to prevent the siphoning off of high-quality students that would otherwise be attracted to other fields where Federal scholarships are available. This might be particularly true of high school students planning their career.

The road to becoming a physician is long, arduous, and expensive. More than 70 percent of the freshmen at osteopathic colleges hold baccalanreate or advance degrees, none can enter without a minimum of 3 years of preprofessional college work. The standard curriculum of an osteopathic college requires at least 5,000 hours of professional instruction distributed over 4 college years. The graduate then begins an internship of 12 to 24 months in a hospital approved for intern training by the American Osteopathic Association. After internship, an increasing number of graduates enter on 3-year terms of residency training in approved residency training hospitals, followed by 2 years of specialty practice preparatory to examination for certification by specialty boards in such specialties as internal medicine, surgery, radiology, obstetrics, gynecology, pedlatrics, and pathology.

We are most grateful for this opportunity of presenting onr views on this important legislation. We hope it can be enacted during the current session.

We also support the Senate-passed bill S. 576, which provides that loans under Public Law 88–129 to medical, osteopathic, and dental stndents may be forgiven at the rate of 10 percent a year up to a total of 50 percent for practice in State-certified shortage areas.

The CHAIRMAN. Doctor, thank you very much.

There are five schools of osteopathy?

Dr. MACBAIN. Yes, sir.

The CHAIRMAN. What is your experience under existing law? I have tried to find out, in going over your statement, how you have come out with the present law which we have had now one year.

Dr. MACBAIN. We have made full use of the loan provisions of the law. Our college is making application before——

The CHAIRMAN. Have you had any application for construction?

Dr. MACBAIN. Our college is making one before the end of this month under the present law.

The CHAIRMAN. Has there not been an application made and approved for the construction of an osteopathic school under the original Act?

Dr. MACBAIN. There was one made under this act, but it was referred back for further refinement of the application.

The CHAIRMAN. Then you have no experience of construction yet?

Dr. MACBAIN. No, we have not.

The CHAIRMAN. You do have one with loans?

Dr. MACBAIN. Yes.

The CHAIRMAN. How many students have received loans under the present program?

Dr. MACBAIN. I cannot give that for any others than my own school, but will supply it for the record. There have been about 60 in my school.

(The information supplied follows:)

In the 1964–65 academic year, 498 ont of a student body of 1,661 received loans under Public Law 88–129. The schools requested $1,244,772 but were limited to $398,088 or 32 percent dne to insufficient allocable funds.

The CHAIRMAN. How many students do you have in your school?

Dr. MACBAIN. We have 234 at the present time.

The CHAIRMAN. Are you a 4-year school, or 3?

Dr. MACBAIN. Yes; a 4-year school.

The CHAIRMAN. A 4-year school?

Dr. MACBAIN. Yes, sir.

The CHAIRMAN. How many do you graduate approximately each year?

Dr. MACBAIN. About 60.

The CHAIRMAN. You graduate about 60?

Dr. MACBAIN. Yes. We had a small class this year, but our usual class is 60.

The CHAIRMAN. How many do you take in each year approximately?

Dr. MACBAIN. Seventy-five.

The CHAIRMAN. You have an attrition of approximately 15?

Dr. MACBAIN. Yes.

The CHAIRMAN. That is very good.

And how many did you say obtained loans out of this year's grant?

Dr. MACBAIN. I am speaking of the whole student body. Most of these loans applied to the freshmen, to the entering students, not to the graduating students.

The CHAIRMAN. Yes.

Dr. MACBAIN. The graduating students had their loans under the National Defense Act, which preceded this act.

The CHAIRMAN. Do you still have students that get help under the National Defense Act?

Dr. MACBAIN. No; not any more. They are all changed over to this act now.

The CHAIRMAN. I see. Well, thank you very much.

Are there any questions?

Thank you very much for your statement and your presentation here for this record on behalf of your National Association.

We will recess for approximately 20 minutes.

(Recess.)

The CHAIRMAN. Dr. Brachman, in view of your transportation problem, we will take you at this time.

STATEMENT OF DR. PHILIP R. BRACHMAN, CHAIRMAN, COUNCIL ON EDUCATION OF THE AMERICAN PODIATRY ASSOCIATION; ACCOMPANIED BY DR. ABE RUBIN, EXECUTIVE SECRETARY OF THE COUNCIL ON EDUCATION, AND EDITOR, JOURNAL OF THE AMERICAN PODIATRY ASSOCIATION

Dr. BRACHMAN. Mr. Chairman and members of the committee, on my right is Dr. Abe Rubin, executive chairman of our council on education. I am Philip R. Brachman, B.A., D. Sc., a practicing podiatrist in Chicago, Ill.; a member of the faculty of the Illinois College of Podiatry and of the staff of the American Hospital, both at that city.

I am here as chairman of the Council on Education of the American Podiatry Association.

We support the purposes of H.R. 3141 in its entirety and ask for inclusion of podiatry in all of its facets, and not just in the construction grants program as it is now constituted.

It is not common knowledge that foot health problems are of serious proportions. In 1951 the Public Health Service "Report on Physical Status of Men Examined Through Selective Service in World War II" discloses that twice as many registrants were rejected for foot problems as were for dental problems of the registrants examined.

While these numbers are significant, the incidence of foot problems in the rapidly expanding older population makes real demands on the podiatrist.

The 1961 White House Conference on Aging in one report stated:

The institutionalized or home care patient once moving about with pain-free feet is more easily motivated for total rehabilitation. Eighty-five percent of these older people have foot problems. Over 40 percent of the practicting podiatrists in our Nation now serve in nursing homes, and one out of three serves in homes for the aged.

Studies demonstrate that in 1978 if the present capacity of the colleges is unchanged, the deficit of podiatrists will be considerably more than 4,700, which is more than 50 percent of our total podiatrists in practice today.

The situation cannot be changed materially until the facilities of the colleges are expanded. In order to care for the deficits in the number of podiatrists needed by 1980 and to provide the number needed to supply the profession in keeping with increases in population, the podiatry colleges will have to graduate about 600 students annually beginning with 1968. This is approximately three times their present capacity.

Our colleges are all private nonprofit institutions. None receive public funds in support of their operation. Without Federal support podiatry colleges will not be able to train sufficient numbers of podiatrists and to train them well enough to meet the demands of our increasing population. Scholarship grants are needed in colleges of podiatry for the same reasons as in schools of medicine, osteopathy, or dentistry, that is to make it possible for the less affluent but highly capable young people to enter the profession. Without such financial aid and with the rising costs of attending professional schools, there is great danger that these professions in the future will be manned by persons who cannot surmount the financial barrier but who are not necessarily the most capable of our people.

Every college of podiatry has indicated its intent to file an application for a construction grant, and one has already filed such an application which is to be considered this coming November. The expectation is that within a very few years all of the colleges will provide for construction grants provided the authorization for such grants is extended.

At present, podiatry students participate in student loans authorized by the National Defense Education Act. The Colleges of Podiatry now request that they be included in the student loan provisions of the Health Professions Educational Assistance Act of 1963 for reasons which you will find in the report.

We are confident that your committee in its deliberations will find it advisable to provide podiatry institutions the same opportunity that is being provided for medical, dental, and osteopathic schools, since podiatry schools will prepare their students to practice by medical and surgical means.

Thank you for the opportunity to present this information. It will be a privilege to answer any questions you may have.

The CHAIRMAN. Doctor, your full statement will be included in the record along with your supplemental statement. Also, the exhibit which you have presented as well as the references.

I assume you want the exhibits included, do you not?

Dr. BRACHMAN. Yes, sir; thank you.

(The documents referred to follow:)

STATEMENT OF THE AMERICAN PODIATRY ASSOCIATION BY DR. PHILIP R. BRACHMAN

Mr. Chairman and members of the committee, I am Philip R. Brachman, B.A., D.S.C., a practicing podiatrist in Chicago, Ill., a member of the faculty of the Illinois College of Podiatry, and of the staff of the American Hospital, both of that city. I am here as the chairman of the Council on Education of the American Podiatry Association. With me is Abe Rubin, D.S.C., executive secretary of the Council on Education and editor of the Journal of the American Podiatry Association.

The American Podiatry Association is a voluntary, nonprofit federation of 52 component societies. The association's council on education is listed by the Commissioner of Education, U.S. Department of Health, Education, and Welfare, as the national accrediting agency for podiatry schools. Podiatry schools are listed in the "Directory of Higher Education" published by the Office of Education. Three of the schools are more than 50 years old. One celebrates its 50th anniversary next year, and the fifth college will graduate its first class in 1967. Some general information about podiatry institutions and their programs is provided on attached exhibit "A."

We appear before you today to explain the interest and concern of the podiatry profession and its colleges in the legislation you are considering as H.R. 3141. H.R. 3141 proposes, as President Johnson said in his health message this past January, to provide "support now to increase the quantity and assure the continuing high quality" of those "who serve our Nation's health." The four features of H.R. 3141 will provide: (1) Educational improvement grants, (2) scholarship grants, (3) extension construction program for medical, dental, and other health profession schools, and (4) extension and improvement of the program for student loans.

The Health Professions Educational Assistance Act of 1963 provides an opportunity for podiatry colleges to participate in the construction grants but not loans to podiatry students. It is our position that podiatry institutions should have the opportunity to participate in all programs designed to increase health manpower and maintain or improve the quality of their education. We shall present some information which, we hope, will enable you to make the decision to include podiatry institutions in all facets of this legislation.

THE NEED FOR MORE PODIATRISTS

It is not common knowledge that foot health problems are of serious proportions. A 1951 Public Health Service Report[1] on the physical status of the men examined through selective service in World War II disclosed that twice as many registrants were rejected for foot problems (1.4 percent) as were for dental problems (0.7 percent); 90.1 per 1,000 of those examined registrants had foot defects as compared with 116.1 per 1,000 for dental defects.

While these numbers are significant, the incidence of foot problems in the rapidly expanding older population makes real demands on the podiatrists.

The 1961 White House Conference on Aging in one report stated: "The institutionalized or home-care patient once moving about with pain-free feet is more easily motivated for total rehabilitation. Eighty-five percent of these older people have foot problems." Over 40 percent of the practicing podiatrists serve in nursing homes, and one out of three serves homes for the aged.[2]

This is not a service duplicated or provided by another health service. A report of the Judicial Council[3] of the American Medical Association published in April 1939 states that foot health care and service is "too often neglected. General opinion seems to be that chiropody (podiatry) fairly well satisfies a gap in medical care that the (medical) profession has failed to fill." Samuel L. Andelman,[4] commissioner of health, Chicago Board of Health, says podiatry is not just filling a gap, actually it is filling a vacuum.

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[1] Goldstein, Marcus S., "Physical Status of Men Examined Through Selective Service in World War II"; reprint No. 3080, Public Health News, vol. 66, No. 19, May 11, 1951, pp. 587–609.

[2] Egerter, R. C., and Gilbert, Arthur, C. F., "A Look at Today's Podiatrist: Some Measures of the Growth of the Profession," vol. 54, Journal of American Podiatry Association, September 1964, pp. 630–634.

[3] Report of the Judicial Council. Journal of the American Medical Association, Apr. 8, 1939, p. 1, 384 (abstracted and annotated in Journal of the American Medical Association, special edition, June 7, 1958).

[4] Andelman, S. L., "Public Health and the Aged," Journal of the American Podiatry Association, vol. 50, No. 12, December 1960, pp. 967–969.

Recognizing the need to develop some information about podiatry and its services, the American Podiatry Association established a special studies division in 1963. It was fortunate in obtaining the services of the former Assistant Commissioner for Higher Education, Lloyd E. Blauch, Ph. D., to direct these studies. One of the first projects was to make an inventory of the podiatrists in the United States and to assess manpower needs. Studies were also made of enrollments in podiatry schools. Reprints of these reports (exhibits B, C, D) are attached. The studies demonstrate that in 1978 if the present capacity of the colleges is unchanged, the deficit of podiatrists will be considerably more than 4,700. The situation cannot be changed materially until the facilities of the college are expanded. In order to care for the deficits in the number of podiatrists needed by 1980, and to provide the number needed to supply the profession in keeping with increases in population, the podiatry colleges will have to graduate about 600 students annually beginning with 1968. This is approximately three times their present capacity.

EDUCATIONAL IMPROVEMENT GRANTS

In 1960, the American Podiatry Association established a Special Commission on the Status of Podiatry Education "to examine from a broad point of view the profession's educational program and advise on steps necessary to improve this program." William K. Selden, LL. D., executive secretary of the National Commission on Accrediting, chaired the commission. Copies of the report, "Podiatry Education in the 1960's," were supplied Members of Congress in a previous session when hearings were being held on proposed legislation for assistance to health professions education. On the attached exhibit E we have quoted some pertinent recommendations from the report.

The report generated much interest in our professional education. A fund for podiatry education research was organized and stimulated the giving by alumni and friends of more than $250,000 in the first 3 years. The association, through its dues structure, is providing matching grants of $10,000 annually to each of our schools.

Exhibit F is a comparison of some data about our schools just prior to the commission's report, and now 5 years later. Enrollment is up over 40 percent; operating expenditures have risen 131 percent; the average cost of education per student has jumped from $980 to $1,680; the number of full-time instructors has increased 107 percent.

The colleges are all private, nonprofit institutions. None receive public funds in support of their operation. Without Federal support, podiatry colleges will not be able to train sufficient number of podiatrists and to train them well enough to meet the needs of our increasing population.

SCHOLARSHIP GRANTS

Scholarship grants are needed in colleges of podiatry for the same reasons as in schools of medicine, osteopathy, or dentistry; that is, to make it possible for the less affluent but highly capable young people to enter the profession. Without such financial aid, and with the rising costs of attending professional schools, there is great danger that these professions in the future will be manned by persons who can surmount the financial barrier, but who are not necessarily the most capable of our people.

Another reason for including colleges of podiatry in the provisions for scholarship grants is to provide freedom of choice for young people who wish to prepare for professional health service. Obviously, freedom of choice is narrowed when one field of study offers financial inducements while a competing field does not. It is sound policy to encourage young people to enter those fields of service in which their major interests lie and for which they have aptitude.

Furthermore, it should also be noted that many students, particularly the less affluent, will inevitably be attracted to professional fields which offer financial help, often regardless of their major interests. Thus, a lack of scholarships in podiatry, when other health fields have them, would seriously handicap the colleges of podiatry in their efforts to recruit a fair share of talent.

We urge, therefore, that podiatry be included among the professional fields for which scholarship grants will be made.

EXTENSION OF CONSTRUCTION GRANTS

Every college of podiatry has indicated its intent to file an application for a construction grant, and one has already filed such an application which is to be considered this coming November. The expectation is that within a very few years all the colleges will apply for construction grants, provided the authorization for such grants is extended. Three of the colleges have to settle problems in connection with land acquisition associated with urban redevelopment projects. In a fourth, a change of administration is imminent. In all of these colleges, considerable development of physical facilities is contemplated for the near future.

The manpower studies that have been completed recently demonstrate a real need for many more podiatrists and facilities in which to train them. Therefore, the American Podiatry Association urges the extension of the construction grant program for medical, dental, and other health profession schools.

STUDENT LOANS

At present, podiatry students participate in student loans authorized by the National Defense Education Act (Public Law 88–665). The colleges of podiatry now request that they be included in the student loan provisions of the Health Professions Educational Assistance Act of 1963 for the following reasons:

(1) Under the National Defense Education Act, a borrower is usually required to begin repayment of the principal 1 year after the date on which he ceases to pursue a full-time course of study. Under the Health Professions Educational Assistance Act, repayment of student loans need not begin until 3 years after the borrower ceases to pursue a full-time course of study. The 3-year period of grace granted before repayment is required would be highly advantageous for podiatry students for two reasons:

(*a*) A significant number continue on in specialized training in internships and residencies during which time they have little or no income and frequently have sizable expenses, and

(*b*) Graduates in podiatry, for the most part, enter independent practice and require time, often considerably more than 1 year, to develop financial ability to repay loans. Only rarely do graduates in podiatry assume salaried positions.

(2) Under the National Defense Education Act, Federal funds for student loans are allotted to States. An institution of higher education competes with other institutions in its State for a share of loan funds. Some colleges of podiatry report that they have not been able to obtain sufficient sums to meet all demands for loans to their students. Under the Health Professions Educational Assistance Act, an applicant institution competes with other institutions of its type on a nationwide basis. Since the five podiatry colleges serve the entire Nation, transfer to the Health Professions Educational Assistance Act is more appropriate.

(3) There is an incongruity in having colleges of podiatry excluded from the student loan provisions of the Health Professions Educational Assistance Act when these colleges are included for construction grants. Furthermore, colleges of podiatry train professional health personnel, and they should be included with institutions for the health professions.

In view of these considerations, we request that loans be authorized for podiatry students on the same basis as loans to students of other health professions.

President Johnson in his health message to Congress stated: "In all sectors of health care, the need for trained personnel continues to outstrip the supply." We submit that in the podiatry sector the need and demand is increasing at a much more rapid rate than podiatry institutions can cope with. We are confident that your committee in its deliberations will find it advisable to provide podiatry institutions the same opportunity that is being provided for medical, dental, and osteopathic schools, since podiatry schools also prepare their students to practice by medical and surgical means.

Thank you for the opportunity to present this information. It will be a privilege to answer any questions you may have.

Exhibit A: Facts about the colleges of podiatry.

Exhibit B: Number of Podiatrists Needed, by Lloyd E. Blauch, Ph. D., volume 55, No. 5, JAPA, May 1965, pages 356–359.

Exhibit C: Present Manpower Deficit in Podiatry, by Lloyd E. Blauch, Ph. D., volume 54, No. 8, JAPA, August 1964, pages 511–553.

Exhibit D: Enrollment, Spaces, Manpower Shortages, and Projected Podiatry Construction, by Abe Rubin, D.S.C., volume 54, No. 10, JAPA, October 1964, pages 709–712.

Exhibit E: Podiatry Education, Some Recommendations by the Special Commission on Status of Podiatry Education, 1961.

Exhibit F: Some Comparative Data, 4-Year Podiatry Colleges.

EXHIBIT A

FACTS ABOUT THE COLLEGES OF PODIATRY

I. COLLEGE AND LOCATION

	Year founded
California Podiatry College, San Francisco, Calif	1914
Illinois College of Podiatry, Chicago, Ill	1912
M. J. Lewi College of Podiatry, New York, N.Y	1911
Ohio College of Podiatry, Cleveland Ohio	1916
Pennsylvania College of Podiatry, Philadelphia, Pa	1963

II. EDUCATIONAL PROGRAMS

(*a*) *Entrance requirements.*—The minimum entrance requirements include attendance for 2 academic years at an approved college of arts and sciences or institute of technology with 60 semester hours of baccalaureate credit and satisfactory completion of courses in general biology or zoology, general chemistry with laboratory, organic chemistry, English, physics or mathematics, and electives in humanities or basic sciences.

(*b*) *Professional curriculum.*—The professional curriculum includes 4,200 clock-hours of instruction distributed over 4 academic years. It includes basic biological and physical sciences, technical and professional subjects, and clinical study and practice.

(*c*) *Degrees.*—The two most common degrees are Doctor of surgical chiropody (D.S.C.) and Doctor of Podiatry (Pod. D.). The colleges have recently agreed to use only two degrees: Doctor of Podiatric Medicine (D.P.M.) and Doctor of Podiatry (P.D.).

III. STATE REGULATION OF PRACTICE

In all States and the District of Columbia the practice of podiatry is regulated by law. Practitioners are licensed by State boards of podiatry examiners, State boards of medical examiners, a State board of health (one State), or a State board of podiatry—medical examiners (one State), to treat the human foot by medical and surgical means.

EXHIBIT B

NUMBER OF PODIATRISTS NEEDED

(By Lloyd E. Blauch, Ph. D.[1])

A study of the geographic location of the 8,008 registered podiatrists in the United States in 1963 revealed a shortage of 3,000 podiatrists. This deficit was based on the assumption that each city with a population of over 10,000 would provide a satisfactory practice for a podiatrist.

If the number of podiatrists is to keep pace with the Nation's expanding population, it is estimated that 13,559 podiatrists will be needed by the year 1978.

Elsewhere it has been shown that in December 1963, there were 8,008 (7,995 under 75 years of age) registered podiatrists in the Nation, and it was estimated that about 3,000 more were needed at that time.[2] This estimate was made through a careful study of the geographic location of the podiatrists. It was assumed that a city of 10,000 population was large enough to provide a satisfactory practice

[1] Director, Division of Special Studies, American Podiatry Association.
[2] Blauch, L. E., "Present Manpower Deficit in Podiatry." J.A.P.A. 54: 551–553, 1964.

for a podiatrist. (This assumption appears to be justified by the fact that 582 podiatrists were found in 494 cities with populations under 10,000.) It was also assumed that in cities over 10,000 population every 10,000 population would provide a satisfactory practice for a podiatrist. On this basis there was a total deficit (or shortage) of 2,997 podiatrists in 1963.

And how about the future? The need and demand for podiatrists in the years ahead will depend on several factors, among them an expanding population, increasing public understanding and appreciation of podiatry service, and an enlarging capacity of the people to pay for podiatry service. The expanding population is the only factor that is readily measurable, but the others are also very significant.

It should also be recognized that ways may be developed to increase the service productivity of individual podiatrists, such as, for example, the use of auxillary personnel and greater use of hospitals and nursing homes for patients with foot conditions. Increased podiatry service for hospitalized patients may, of course, increase the need for more podiatrists. Prepayment plans and public provision for health services may also affect the need for podiatrists.

The U.S. Bureau of the Census provides estimates of population for future years, which are in four series; A, B, C, and D; based on different assumptions relating to fertility, mortality, and net immigration.[3] Series A consists of the highest estimates and series D the lowest estimates. Series B, which is used in this paper, is the series used by the U.S. Public Health Service in its computations. It suggests an increase of 25.4 percent in the 15 years from 1963 to 1978.

In 1963 the Nation's population was 189,278,000 which was served by 7,995 podiatrists,[4] that is, for every 100,000 population there were 4.22 podiatrists. If one assumes that the number of podiatrists should increase as rapidly as the population, and if the ratio of podiatrists to population would remain as in 1963, it appears from table I that in 1968 the Nation should have 8,449 podiatrists; in 1973, 9,090 podiatrists; in 1978, 9,849 podiatrists (assumption A). However, if one begins with the estimated number of podiatrists required in 1963 (7,995 plus 3,000, or a total of 10,995), the number for every 100,000 population should be 5.89 (assumption B). At this rate the number required in 1968 would be 11,632 podiatrists; in 1973, 12,515 podiatrists; in 1978, 13,559 podiatrists.

TABLE I.—*Estimates of population and number of podiatrists needed using series B population figures*

Year (July 1)	Population (series B)	Podiatrists needed on basis of 4.2 podiatrists per 100,000 population (assumption A)	Podiatrists needed on basis of 5.9 podiatrists per 100,000 population (assumption B)
1963	189,278,000	[1] 7,995	10,995
1968	200,212,000	8,449	11,632
1973	215,409,000	9,090	12,515
1978	233,378,000	9,849	13,559

[1] The total number of podiatrists was 8,008. It is estimated that 7,995 were under 75 years of age.

PODIATRISTS IN FUTURE YEARS

Losses of the manpower in podiatry occur in two ways: (1) By death and (2) by retirement. Unfortunately the records of the profession over the past years are not complete, and, therefore, estimates of the numbers of podiatrists in the future are made on the basis of survival rates of podiatrists in 1963 and the recruits (graduates of podiatry colleges) who join the profession from time to time.

The additions to the profession (graduates of colleges of podiatry) for 1955 and the following years are shown in table II.

[3] U.S. Department of Commerce, Bureau of the Census, "Projections of the Population of the United States, by Age and Sex: 1964–85, With Extensions to 2010." P. 2. U.S. Government Printing Office, Washington, D.C., July 1964.

[4] Podiatrists retire from practice at various ages. However, for this study only podiatrists under the age of 75 years are considered. A number 75 years old and older continue in practice, but this number is probably no greater than the number who retire before reaching the age of 75 years.

The estimates of numbers of podiatrists under 75 years of age at various times are shown in table III. They are explained as follows:

1. Survival rates are from mortality tables. Thus, of 100 persons 25 to 29 years old, 99.259 percent will survive into the next 5-year period (column 2).

TABLE II.—*Enrollments in colleges of podiatry, 1951–52 to 1960–61 with projections to the future, and annual numbers of graduates*

Academic year	First year enrollment	Year	Graduates [1]
1951–52	186	1955	161
1952–53	154	1956	140
1953–54	133	1957	106
1954–55	145	1958	119
1955–56	178	1959	170
1956–57	159	1960	138
1957–58	139	1961	119
1958–59	122	1962	101
1959–60	131	1963	111
1960–61	136	1964	102
1961–62	139	1965	126
1962–63	155	1966	134
1963–64	208	1967	175
1964–65	184	1968	156
1965–66	[2] 225	1969	[3] 191

[1] From 1951–52 to 1960–61 the total of first year enrollments was 1,482. The corresponding graduates 4 years later came to a total of 1,267—about 85 percent of the corresponding first year enrollments. The numbers of graduates from 1955 to 1964 are actual; the numbers beginning with 1964 are estimated based on enrollments in 2d year, 3d-year and 4th-year classes in 1964–65; the numbers beginning in 1968 are 85 percent of 1st-year enrollments 4 years earlier.
[2] Number that can be accomodated on the basis of present capacity and continuing indefinitely.
[3] Continuing indefinitely.

2. The age distribution of the podiatrists in 1963 has been computed from ages reported by 3,309 respondents to a questionnaire early in 1964 (col. 3).

3. Of the 553 podiatrists in the age group 25–29 years, 549 (99.259 percent of 553) will be found in the age group 30–34, in 1968 (col. 4).

4. Similarly of the 929 podiatrists in the age group 30–34 years, 921 (99.133 percent of 929) will be found in the age group 35–39 years in 1968 (col. 4). Similar computations for all age groups in column 3 produce other numbers in column 4.

5. In each 5-year interval new podiatrists join the profession. They will be in the age group 25–29 years (693,955, and 955, as shown in cols. 4, 5, and 6).

TABLE III.—*Numbers of podiatrists at various times based on (1) the total number in 1963, (2) the number of recruits (graduates of the colleges), and (3) the number of survivors through the passing years*

Age group	Survival rates	1963 supply	Survivors in 1968	Survivors in 1973	Survivors in 1978
(1)	(2)	(3)	(4)	(5)	(6)
25 to 29	99.259	553	[1] 693	[1] 955	[1] 955
30 to 34	99.133	929	549	688	948
35 to 39	98.733	1,369	921	544	682
40 to 44	97.961	1,257	1,352	909	537
45 to 49	96.590	1,201	1,231	1,324	890
50 to 54	94.370	1,201	1,160	1,189	1,279
55 to 59	91.504	785	1,133	1,095	1,122
60 to 64	84.427	450	718	1,037	1,002
65 to 69	81.218	150	393	628	907
70 to 74	74.702	100	122	319	510
Total		7,995	8,272	8,688	8,832

[1] Podiatrists (graduates of colleges of podiatry) entering practice.

6. Additions of columns 3, 4, 5, and 6, respectively, show the numbers of podiatrists under 75 years of age to be: 7,995 in 1963, 8,272 in 1968; 8,688 in 1973; and 8,832 in 1978.

DEFICITS OF PODIATRISTS IN FUTURE YEARS

In table IV data from tables I and III are combined to show the deficits in the numbers of podiatrists required in future years. The figures indicate that the supply of podiatrists will increase in the next 15 years but not as rapidly as the number needed in order to maintain the podiatrist-population ratio of 4.22 per 100,000 as in 1963 (assumption A) or 5.81 per 100,000 (assumption B). The result will be a mounting deficit due to the supply of podiatrists not keeping up with the population increases, which by 1978 will reach 4,017 (1,017 plus the 3,000 deficit in 1963) (assumption A) or 4,727 (assumption B).

TO SUM UP

It is now possible to obtain a general picture of the manpower situation in podiatry in the near future years. The summary runs as follows:

1. In 1963 there were 8,008 registered podiatrists in the Nation; 7,995 were under 75 years of age.
2. The deficit in the number of podiatrists needed in the Nation in 1963 on the basis of geographic distribution was about 3,000.
3. The deficit in numbers required in the future to keep up with the population increase, taking into account the supply in 1963 (7,995) and the deficit (3,000) in the same year, will be considerably more than 4,000 by 1978. In making this statement it is assumed that the present capacity of the colleges of podiatry will remain unchanged.

TABLE IV.—*Deficits in the number of podiatrists needed at various times, 1963–78*

Year	Total population	Estimated number of podiatrists (table III)	(Assumption A)—Ratio of 4.22 podiatrists per 100,000 population		(Assumption B)—Ratio of 5.81 podiatrists per 100,000 population	
			Podiatrists needed (table I)	Expected deficit	Podiatrists needed (table I)	Expected deficit
1963	189,273,000	7,995	7,995	----------	10,995	3,000
1968	200,212,000	8,272	8,449	177	11,632	3,360
1973	215,409,000	8,688	9,090	402	12,515	3,827
1978	233,378,000	8,832	9,849	1,017	13,559	4,727

4. The situation cannot be changed materially until the facilities of the colleges of podiatry are expanded to accommodate and graduate greater numbers of students. In order (1) to care for the deficits in the number of podiatrists needed by 1980 and (2) to provide the number needed to supply the profession in keeping with increases in population, the colleges would have to graduate about 600 students annually beginning with 1968. That number of graduates each year would require first-year enrollments of about 700.

WHAT THIS MEANS

It appears rather obvious from the situation described above that public need for podiatry service will not be adequately cared for in the near years ahead unless (1) there is considerable improvement in recruiting, (2) expansion of facilities to train more persons to practice the profession occurs and (3) steps are taken to effect a distribution of podiatrists, particularly newcomers to the profession, into geographic areas which are undersupplied. This presents a challenge to many persons and groups, but more especially to the podiatry profession which is dedicated to serving the foot health conditions of the public, and (2) to those public spirited individuals and groups outside the podiatry profession who are particularly concerned for the health and welfare of the men, women and children of the Nation.

Acknowledgement.—The helpful assistance of Mrs. Maryland Y. Pennel, chief, Health Manpower Statistics Branch, Center for Health Statistics, U.S. Public Health Service, is gratefully acknowledged. Mrs. Pennel suggested the way to compute the number of survivors in various age groups of podiatrists. She also read and criticized a draft of the article.

(Reprint from vol. 55, No. 5, Journal of the American Podiatry Association, May 1965, pp. 356–359.)

EXHIBIT C

PRESENT MANAGEMENT DEFICIT IN PODIATRY

(By Lloyd E. Blauch, Ph. D.,[1] Washington, D.C.)

In a paper published [2] earlier this year, the first report of the manpower studies being conducted by the division of special studies of the American Podiatry Association was presented. A summary table showed the number of registered podiatrists and the ratio of podiatrists per 100,000 population, by State.

From the table it can be seen that over half the podiatrists practice in States where the ratio is 7.6 or higher. With the Nation's population today (June 1964) being 192 million, there would need to be 14,692 podiatrists to provide every State with at least the aforementioned ratio of podiatrists to population. But there are only slightly over 8,000, which represents a deficit of more than 6,600 podiatrists. This is one rough estimate. To obtain more valid estimates, and on a State-by-State basis, the division of special studies has made a detailed manpower survey.

Lists of State registered podiatrists as of the end of 1963, were obtained directly from State boards of podiatry examiners, or other appropriate State licensing bodies. Lists were cross-checked to eliminate duplicate registrations (or license). A podiatrist, who is licensed in more than one State is listed only by his principal office or address.

Detailed tables were then compiled for each State. In each State the podiatrists were tabulated by county, cities, and standard metropolitan statistical areas. From these State tables, a summary table (table I) for the Nation was prepared. It may be of interest to the reader to know that, in the Nation, there are 3,115 counties, 2,168 places with over 10,000 population and 215 standard metropolitan statistical areas.

In estimating the number of additional podiatrists that the country should have, one could use several procedures. In the light of our present state of knowledge, the best procedure seems to be to employ as a basis the size of communities that afford a satisfactory practice for a podiatrist. In following this procedure, three figures are used: (1) The number of registered podiatrists; (2) the number of podiatrists needed, based on the ratios of podiatrists to population; and (3) the deficits, or the number of podiatrists needed less the number registered. These deficits are taken as the estimates of additional podiatrists needed.

The deficits (estimates) are obtained by using three types of geographical units, as follows:

(1) *Counties.*—It is assumed that a county with a population of 20,000 or more can provide a satisfactory practice for a podiatrist; a county with 40,000 people can provide practices for 2 podiatrists, and so on. This assumption appears to be justified by the fact that 69 counties with smaller populations have one or more podiatrists. In computing the deficits by counties, these counties with fewer than 20,000 people which had no podiatrists were not included.

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[1] Director, Division of Special Studies, American Podiatry Association, Washington, D.C.

[2] Blauch, Lloyd E., Ph. D., "Numbers and the Podiatry Profession," JAPA, 54: 4: 248–252 (April 1964).

TABLE I.—*Number of podiatrists registered in the United States and deficit in numbers based on ratios of numbers of podiatrists to population*

State	Registered podiatrists		Deficit in number of podiatrists on basis of		
	In the State	In SMSA of the State	1:20,000 population in counties	1:10,000 population in cities	1:10,000 population in SMSA
Alabama	28	25	100	97	121
Alaska	1	(1)	5	4	(1)
Arizona	35	31	24	43	61
Arkansas	18	8	41	25	25
California	756	697	109	390	657
Colorado	70	57	15	32	60
Connecticut	196	166	2	33	31
Delaware	21	18	3	0	12
Dist. Columbia	64	96		12	104
Florida	170	137	58	78	184
Georgia	49	40	70	92	134
Hawaii	4	4	22	32	46
Idaho	20	(1)	2	4	(1)
Illinois	813	719	32	52	42
Indiana	166	69	40	60	82
Iowa	96	48	17	24	40
Kansas	49	22	28	42	58
Kentucky	65	45	36	26	57
Louisiana	34	31	93	113	120
Maine	29	12	15	13	7
Maryland	78	62	67	75	179
Massachusetts	552	498	13	43	16
Michigan	264	213	92	190	354
Minnesota	89	62	39	68	112
Mississippi	8	3	55	42	15
Missouri	102	74	63	106	163
Montana	13	7	2	7	7
Nebraska	37	20	5	22	32
Nevada	12	12	2	5	8
New Hampshire	29	7	2	2	2
New Jersey	421	301	16	95	89
New Mexico	21	10	13	22	16
New York	1,462	1,365	40	88	192
North Carolina	49	30	127	71	79
North Dakota	10	3	2	5	3
Ohio	524	430	45	84	224
Oklahoma	46	30	34	59	71
Oregon	40	26	33	23	62
Pennsylvania	921	780	14	76	165
Rhode Island	66	61	2	15	30
South Carolina	15	9	81	28	58
South Dakota	17	6	2	3	2
Tennessee	42	33	93	87	127
Texas	158	145	215	400	453
Utah	19	18	16	15	41
Vermont	10	(1)	5	3	(1)
Virginia	56	34	95	98	111
Washington	64	47	61	61	122
West Virginia	40	25	33	8	30
Wisconsin	153	99	29	49	82
Wyoming	6	(1)	5	7	(1)
Totals	8,008	6,635	1,991	2,997	4,686

[1] No standard metropolitan statistical area (SMSA) in the State.

(2) *Cities.*—It is assumed that a city with a population of 10,000 or more can provide a satisfactory practice for a podiatrist. This assumption appears to be justified by the fact that 582 podiatrists are found in 494 cities with populations under 10,000.

(3) *Standard metropolitan statistical areas.*—Such an area consists of a large city (at least 50,000 population) and a surrounding county or counties. These areas, 250 of them, have been designated by the Bureau of the Budget. They are used in estimates made by Federal offices from time to time. A standard metropolitan statistical area (SMSA) is defined as an "integrated economic and social unit with a recognized large population nucleus." Each SMSA is treated in this study as a city (1 podiatrist to 10,000 population) in estimating the number of podiatrists needed.

From these data it can be assumed that there is a present deficit of podiatrists ranging from 2,000 to 6,600 depending upon the manner in which the estimate is obtained. A deficit of 3,000 is probably the most realistic estimate.

Future reports will consider manpower needs in podiatry for our rapidly expanding population and the greatly increasing utillaztion of and demand for podiatry services.

(Reprint from volume 54, No. 8, Journal of the American Podiatry Association, August 1964, pages 551–553.)

[Reprint from vol. 54, No. 10, Journal of the American Podiatry Association, October 1964, pp. 709–712]

Exhibit D

Enrollment, Spaces, Manpower Shortages and Projected Podiatry Construction [1]

(By Abe Rubin, D.S.C.[2])

ENROLLMENT TRENDS AND FIRST YEAR SPACES

Two tables (I and II) summarize the presently accumulated data on present and past enrollment, number of grade eligible applicants (including number of multiple applicants), number of graduates, and number of spaces available for first year enrollment.

With the close of the 1962 school year, the accreditation of one podiatry college was removed and the institution closed its doors. We could, therefore, complete a check of grade eligible applicants not enrolled, only for the years 1962–63 and 1963–64. However, it will be noted in table II, that enrollment for the several years preceding 1962–63 were quite low and would probably not yield additional significant data.

An examination of the first year enrollments as shown in tables I and II reveals a low point of first year enrollment in the years 1958–59, 1959–60, 1960–61 averaging 127. Beginning with 1961–62, the enrollment has constantly risen, an increase of 64.5 percent and average yearly gain of over 20 percent. Projecting this rate into 1964–65 suggests a first year enrollment of approximately 250 students if the spaces were available.

Table I.—*1st year enrollment, spaces and grade eligible applicants not enrolled in podiatry colleges for the years 1962–63 and 1963–64*

School	1962–63					1963–64				
	Spaces	Enrollment	Grade eligible not enrolled [1]	Applied and enrolled elsewhere	Applied but did not enroll elsewhere	Spaces	Enrollment	Grade eligible not enrolled [1]	Applied and enrolled elsewhere	Applied but did not enroll elsewhere
California	[2] 30	31	20	0	2	35	34	12	0	3
Illinois	50	46	16	5	3	50	54	23	9	2
Lewi	50	20	13	1	1	40	38	12	0	3
Ohio	60	59	12	3	1	60	59	20	5	3
Pennsylvania	([3])	([3])	([3])	([3])	([3])	20	24	18	2	2
Total	190	156	61	9	7	205	209	85	16	13

[1] Grade eligible not enrolled—In 1962–63 the 61 grade eligible applications were submitted by 47 applicants. In 1963–64 the 85 grade eligible applications represented 47 applicants. For these 2 years the number of multiple applications was 52 and 25 of these did enroll at 1 of the institutions for a multiple application rate of 25.8 percent.

[2] California in 1963 opened its Lesoine Hall increasing its spaces to 35.

[3] Pennsylvania admitted its first class in September 1963.

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[1] Adopted from a report submitted to, and at the request of the Division of Hospital and Medical Facilities, Bureau of States Services, Public Health Services, Department of Health, Education, and Welfare, Washington 25, D.C., in connection with Public Law 88–129, June 5, 1964.

[2] Executive secretary, Council on Education, American Podiatry Association.

The following table compares first year enrollment and first year spaces:

	1st year enrollment	1st year spaces
1958 to 1961	[1] 127	240
1961 to 1962	147	190
1962 to 1963	156	190
1963 to 1964	209	205
1964 to 1965 (projected)	250	215

[1] Average.

The drop in first year spaces in 1961 is due to the closing of one institution. In 1963–64, the Pennsylvania College admitted its first class (20 new spaces), the California College continued its rehabilitation and expansion program opening Lesoine Hall (5 additional spaces), but the M.J. Lewi College had to reduce its number of spaces by 10, providing a net gain of 15 spaces in all colleges. An additional 10 will be available in 1964–65 at the Pennsylvania College. The M. J. Lewi reduction arose from some drastically needed rehabilitation in the present structure.

It will be also noted the total occupancy in 1963–64 first year classes is more than 100 percent. This is because two schools each accepted four students more than the spaces indicated, to cover first year attrition.

In the year, 1963–64, in addition to the 209 students admitted to the first year class, 31 additional grade eligible applicants (47 applicants minus 16 enrolled) failed to enroll. It seems to be self-evident that there is need to immediately increase the number of space available to accommodate grade eligible applicants.

Table II shows that number of annual graduates has almost reached bottom (just under 100 in June of 1964) but will be limited to pproximately 200 per annum unless new schools are opened or the present ones enlarge their facilities.

TABLE II.—*Podiatry college enrollment and graduates, 1958–62*

	1962–63 enrollment				1st year classes				June graduates		
	4	3	2	1st	61–62	60–61	59–60	58–59	62	61	60
California	27	14	25	31	24	23	31	30	19	19	17
Chicago					16	14	13	12	6	3	10
Illinois	25	25	32	46	23	22	21	28	25	25	34
Lewi	23	17	30	20	28	20	24	26	24	31	18
Ohio	39	41	42	59	51	48	42	28	22	38	33
Total	114	97	129	156	147	127	131	124	96	116	112

NOTES.—
1. In the past 4 years, there has been an increase of 20.5 percent in 1st year enrollment. 18.6 percent of this in the last 2 years.
2. The average attrition rate in the past 3 years is 16 percent and the mean yearly rate 16.3 percent

House Report 109 and Senate Report 485 noted that we had stated that we had "anticipated a shortage of facilities by 1966." Obviously, we underestimated the rate of growth of our first year enrollment. In fact, if the Pennsylvania College had not admitted its first class in September of 1963, the situation would have been considerably worse.

TRENDS IN THE QUALITY OF APPLICANTS

There is no real data on trends in the quality of applicants as there is no standardized national test for podiatry matriculants. However, each student must have satisfactorily completed at least 60 semester hours in an accredited institution of higher learning, with the usual prerequisites for the health professions. One school has advised us that as of late May 1964, they have accepted for September 1964, 17 applicants for 30 spaces, 15 of whom have baccalaureate degrees, and no applicant with less than a 2. average grade.

The question of standardized national tests for podiatry students has been inquired into. However, there were fairly strong indications that it was not

too feasible for the small number of students involved, and that there is some doubt as to their usefulness as a basis for selecting students for a professional training. Our own fragmentary inquiries suggest that motivation (judged by interviews) is a much stronger factor in student success, provided the student has minimal prerequisites. In fact, high motivation has overcome in a significant number of instances a relatively low entrance grade.

MANPOWER NEEDS IN PODIATRY

At the recent 24th Eastern States Health Conference, the theme was "The Expanding Role of Ambulatory Services in Hospitals and Health Departments." Norman R. Ingraham, M.D., Philadelphia Commissioner of Health, reported podiatry as "a service most highly demanded by the elderly." This statement is representative of the rapidly increasing utilization of podiatry services.

In order to learn some data about the increasing utilization and the extent of podiatry manpower available, some studies have been undertaken by the Special Studies Division of the American Podiatry Association. Two early reports have been published.[1 2] These are the first reports of these studies. Reports are not yet available relating our numbers and distribution to the growth of the Nation's population.

The total registration of podiatrists (the earlier figure of 8,018 has been refined to 8,008) includes nonpractising podiatrists and the retired. The data indicates that there is a present national deficit of podiatrists ranging to over 4,500 but not less than 2,000.

The distribution of podiatrists tends to concentrate in States in which podiatry colleges are located. But, even in these States: New York, Pennsylvania, Illinois, Ohio, and California, there is less than 1 podiatrist per 10,000 population. The deficit in these 5 States alone, based on 1 to 10,000 population in standard metropolitan statistical areas, is 1,285. This is six times the total number of first year spaces presently available.

A complete report on these studies will be available this autumn.

PROJECTED CONSTRUCTION

There are no immediate plans for new schools. However, there have been some discussions regarding the establishment of new schools in southern California, Massachusetts, Texas, Georgia, and Florida. Three or more are likely to materialize within the next decade.

The construction plans of our present schools within the next few years are rehabilitative and will provide for major expansion of enrollment. It should be pointed out that the Council on Education, of the American Podiatry Association, has advised some of the schools that unless rehabilitation occurs, their present number of spaces will have to be reduced. One school, in fact, has stated that unless it can rehabilitate very shortly, the present number of spaces of 50 will have to be reduced to 30. Another school actually reduced its spaces this year by 10.

Here we should like to point out that, although at the moment relatively adequate, frequently dreary and "unmodern" appearance of podiatry college facilities is discouraging qualified desirable applicants from entering the podiatry profession.

The following table shows, by school, the amount of construction planned and the best available timing data.

School	Amount of construction	Will apply for grant
California Podiatry College	$327,995	Being filed.
Illinois College of Podiatry	1,950,000	As soon as possible.
M. J. Lewi College of Podiatry	1,250,000	January 1965.
Ohio College of Podiatry	318,000	1966 or 1967.
Pennsylvania College of Podiatry	400,000	April 1967.
Total	4,245,995	

[1] Blauch, Lloyd E., Ph. D., "Numbers and the Podiatry Profession," J.A.P.A., 54 : 4 : 248–252 (April 1964).
[2] Blauch, Lloyd E., Ph. D., "Present Manpower Deficit in Podiatry," J.A.P.A., 54 : 8 : 551–553 (August 1964).

California College is prepared to begin immediately. In 1963 it completed construction of Lesoine Hall to provide classrooms, laboratories, and related facilities for 45 to 50 students. But it must, however, expand its teaching hospital before clinical material will he sufficient for classes of such size.

The Illinois College of Podiatry is in an area of the city that is being rehabilitated and may be forced to move the institution to a new site if it cannot get its present plans for construction approved by the local authorities. Finalization of plans is imminent awaiting decision as to site, the present one or a new one.

The M. J. Lewi College is planning major expansion and expects to file an application for a Federal grant in January 1965.

The Ohio College of Podiatry is part of the university circle development plan in Cleveland, Ohio, and is being allocated grounds on which major expansion of the present facilities will occur in the next 2 to 3 years. If appropriate and adequate arrangements with a teaching hospital are not realized, it will be necessary for the school to build a small teaching hospital and correspondingly increase the amount of Federal participation that would be requested.

The Pennsylvania College of Podiatry entered its first class in rented quarters this fall and had anticipated qualifying as a new institution. They recently entered into an agreement to purchase an existing hospital and clinic which they will occupy, after rehabilitation, during the summer of 1966. They anticipate that by April 1967 they will be seeking Federal participation in a $400,000 expansion program.

The total projected construction suggests that Federal participation of more than $2 million can be justified in the next 5 to 6 years, approximately half of this in the initial period and the remainder in the early part of the second period.

INITIAL DEGREE OF FEDERAL PARTICIPATION

The increasing demand for podiatry services, the present large deficit of podiatry manpower and an anticipated greater shortage, the need for extensive rehabilitation to prevent lowering of the quality of the training and decrease in the number of first-year training spaces, and the present greater than 100-percent occupancy of first-year spaces requires major expansion of training facilities and justifies Federal participation in the amount of over $2 million in the next 6 years with approximately one-half of this in the next year or two.

As anticipated by Assistant Surgeon General Harald Graning in his letter to the American Podiatry Association of April 29, 1964, we have not provided as much information as we would have preferred. However, we believe that what has been submitted justifies for podiatric institutions some Federal participation through the health professions education assistance program in its initial years of operation. The Council on Education of the American Podiatry Association offers any assistance it can render in these matters.

EXHIBIT E

PODIATRY EDUCATION

SOME RECOMMENDATIONS BY THE SPECIAL COMMISSION ON STATUS OF PODIATRY EDUCATION, 1961

Financial support

"* * * that the American Podiatry Association represent to the appropriate legislative and executive officials of the Government the need and social advisability of making financial provisions for podiatry education, in ways similar to those made for the other health sciences."

Faculties

"* * * that each college of podiatry immediately initiate a program to strengthen its faculty and that practices, including the following, be adopted to effect improvement":

(*a*) The appointment of full-time faculty members with graduate doctoral degrees in the basic sciences;

(*b*) The appointment of faculty members in the clinical sciences who have pursued advanced study beyond their professional degrees;

(*c*) The appointment of some faculty members with degrees in other professional fields, as medicine and pharmacy;

(*d*) The appointment of faculty members who have training in and strong interest in research; and

(*e*) The provision for salaries and working conditions adequate to attract faculty personnel of ability and competence.

"* * * that all deans, directors of foot clinics, and other similar administrative officers be appointed on a full-time basis, and that they be provided salaries commensurate with their responsibilities."

Student aid

"* * * that scholarships and loan funds for students be markedly increased."

The Commission consisted of: (1) three educators, nonpodiatrists, from the field of higher education; (2) one doctor of medicine, a medical educator; and (3) one practicing podiatrist, a member of a board of trustees of a podiatry college.

EXHIBIT F

Some comparative data, 4-year podiatry colleges [1]

	1959–60		1963–64		1964–65	
	Average	Range	Average	Range	Average	Range
Enrollment	105	80–141	137	101–202	146	116–196
Operating expenditures	$103,112	$65,000–$135,000	$192,955	$109,000–$274,000	$237,780	$129,000–$428,000
Average expenditure per student	$980	$750– $1,399	$1,219	$1,038– $2,709	$1,680	$1,015– $3,265
Income from tuition and fees	$67,357	$53,000– $80,000	$111,690	$90,000–$140,000	$131,647	$125,000–$140,000
Tuition and fees per student					$1,009	$800– $1,200
Income from patient services			$60,000	$16,000– $89,000		
Gifts and grants for operations			$25,000	$20,000– $30,000		

[1] These 4 schools in operation 49 or more years. A 5th school admitted its 1st class in September 1963. Data from 5th school is not included.

NOTE.—Operating expenditures, 1959–60 to 1964–65 increased 131 percent; enrollments, 1959–60 to 1964–65 increased 40.9 percent; full-time instructors, 1959–60 to 1964–65 increased 107.7 percent; (1959–60=13, 1961–62=17, 1964–65=27).

The CHAIRMAN. I notice you have an exhibit B which is a statement by Dr. Lloyd E. Blauch; is it not?

Dr. BRACHMAN. Correct.

The CHAIRMAN. And exhibit C is also an article with reference to manpower deficit in the field of podiatry.

There is also a table included with it.

Do you wish that in the record, too?

Dr. BRACHMAN. Yes, sir. Whatever appears.

The CHAIRMAN. Very well, it may be included in the record.

I assume from what you have just said there have been no construction grants approved for schools of podiatry.

Dr. BRACHMAN. We have filed letters of intent, but we have not as yet asked for approval of any of them up to this present time.

The CHAIRMAN. How many schools of podiatry do you have in the country?

Dr. BRACHMAN. We have five, sir.

The CHAIRMAN. What is the total enrollment?

Dr. BRACHMAN. The total enrollment?

I would like to have Dr. Rubin answer that as the secretary.

Dr. RUBIN. 625 this year.

The CHAIRMAN. How many of those are receiving loans or scholarships?

Dr. RUBIN. Four of the schools are participating in the National Defense Education Act. With the raising of the ceiling to $2,500 with the recent change, the fifth one will come in. It has not come in so far because the State itself provides a similar amount, the old amount of $1,000 under the National Defense Education Act.

But we understand that with the coming changes, all five schools will be participating in the student loans.

The CHAIRMAN. Under the National Defense Education Act?

Dr. RUBIN. That is correct, sir.

We are suggesting at this time that it be changed to the Health Professions Educational Act since there is really no difference in the sums of money involved.

The CHAIRMAN. Is the program under the National Defense Education Act satisfactory?

Dr. RUBIN. Two of the schools maintain that they are unable to get sufficient because they have to compete with larger institutions in their States.

The feeling of our colleges is that since there are only five schools serving the entire Nation, that they should be included with the health professions on a nationwide basis instead of by State allotment as is done under National Defense Education Act.

There is also the question of repayment provisions which are more extended under the health professions act than they are under the National Defense Education Act. Since our graduates go on to further education or specialization, or since they are required to go into private practice and do not begin to earn a salary right away, they have a litle bit more difficulty in making immediate payments required under National Defense Education Act.

We feel the provisions of the health professions are a little bit more equitable for them.

The CHAIRMAN. Are there any further questions?

Mr. Mackay?

Mr. MACKAY. I would like to ask if there are any tax-supported schools of podiatry in the country?

Dr. BRACHMAN. I would like to answer that.

There are no tax-supported schools whatever at the present time. Most of the costs of operating our schools, when I say most I think it is in excess of or close to 60 percent of our costs are defrayed from the tuition alone. It is 57.1 percent. The rest of it is derived from sources from our clinics which we operate, which are low-cost; clinics to the indigents, and these are not supported by tax bodies either, and from contributions we receive from the public and our members.

Mr. MACKAY. The other question I have, I know some States have scholarship programs. Do you participate or have any scholarship programs in your schools from any States?

Dr. BRACHMAN. At the present time less than 2 percent of our total students receive grants of any kind from our own societies and from any other sources.

The medical schools I think run to about 16 percent approximately.

Anyhow, ours are only 2 percent, and we are in great need, in dire need of some help for the students who are attending our schools.

The CHAIRMAN. Any further questions by members of the committee?

Dr. Brachman, thank you very much. I thank both of you for your appearance here.

Dr. BRACHMAN. Thank you, sir.

The CHAIRMAN. Dr. Henry Hofstetter.

Dr. Hofstetter?

STATEMENT OF HENRY W. HOFSTETTER, O.D., PH. D., DIRECTOR OF OPTOMETRY DIVISION, UNIVERSITY OF INDIANA; ACCOMPANIED BY WILLIAM P. MacCRACKEN, JR.

Dr. HOFSTETTER. Mr. Chairman, in the interests of saving time, I shall omit the oral reading of large parts of my testimony.

The CHAIRMAN. Doctor, I observe you have a statement.

Dr. HOFSTETTER. Yes.

The CHAIRMAN. It appears to be a full discussion of the subject, together with suggested amendments.

Dr. HOFSTETTER. That is right.

The CHAIRMAN. Your statement will be included in the record, and you may proceed with such supplemental statement as you desire. You may identify that youngster that you have beside you.

Dr. HOFSTETTER. The youngster beside me is Mr. William P. MacCracken, Jr. Junior is correct. He was the Under Secretary of Commerce some years back, a personal friend of Lindbergh and almost everyone that I can remember from history.

The CHAIRMAN. Mr. MacCracken, we are glad to have you with us.

Mr. MACCRACKEN. Thank you, Mr. Chairman. It is always a pleasure to appear before this committee. As you know—perhaps some of the newer members do not—but my first appearance was in 1922 when Mr. Winslow was chairman.

The CHAIRMAN. I do not go quite that far back.

You may proceed.

Dr. HOFSTETTER. My name is Henry W. Hofstetter. I reside at 936 South Hawthrone Lane, Bloomington, Ind. My position at Indiana University is that of professor of optometry and director of the division of optometry since 1952. Prior to my present position I was the dean of the Los Angeles College of Optometry for 4 years, and prior to that I was on the faculty of the School of Optometry at the Ohio State University. I did most of my undergraduate and all of my graduate work leading to my degree in optometry and the M.S. and Ph. D. degrees in physiological optics in the School of Optometry and the Graduate School of the Ohio State University—the last degree in 1942.

I served 4 years as the president of the Association of Schools & Colleges of Optometry, an association of all the optometry schools and colleges of the United States and Canada. In 1962 I was elected to membership on the board of trustees of the American Optometric Association, which represents the great majority of the approximately 17,000 practicing optometrists in the United States. My trustee assignment is with the Department of Public Health Optometry which, with five committees, concerns itself primarily with the study and analysis of the vision care needs of the American public.

I am also a member of numerous organizations, commissions, and committees, including the Optical Society of America Committee on Training in Optics, the American School Health Association Committee on School Health Education, the American Academy of Optometry, the Association for Higher Education, and the American Association for the Advancement of Science Council Study Committee. Other appointments include membership on the Armed Forces-National Research Council Vision Committee, the National Research Council Highway Research Board Committee on Night Visibility, and the National Advisory Council on Education for Health Professions, created by Public Law 88–129. I would like to add this is served by one of the most dedicated groups of staff members that I have ever had the experience to work with.

Aside from my scientific studies I have made several surveys and published several reports on various aspects of optometric education in the United States and other countries. I have traveled extensively in Europe and Africa to study professional education systems outside of the United States. I am personally acquainted with all of the optometry schools and colleges in the United States and Canada and have visited almost half of the optometry schools in other parts of the globe. It is because of my broad familiarity with optometric education needs that I was requested by Dr. Charles Seger, president of the American Optometric Association, to represent the association at this hearing and to offer whatever help I could to this committee.

You will be interested to know that our association was the first professional organization to volunteer our services in the war on poverty. We are currently working hard providing vision care for the 300,000 kiddies in the 8-week program this summer in Project Head Start.

This is not the first time we have offered our help in civic activities. As you know from testimony offered to this committee on highway safety, child care, mental retardation, and like legislation, our members work with many community and fraternal groups engaged in projects related to the public health and welfare.

Our profession is particularly grateful to this committee for its inclusion of schools and colleges of optometry and students of optometery in the health education acts of the 88th Congress. I believe the evidence presented then, concerning the distribution of optometrists and the need for more optometrists, was sufficient that little time should be given now to corroborating the need for more optometrists. It was demonstrated and can be demonstrated again that the present proportion of optometrists to population is not adequate.

In fact, we have previously said that a minimum ratio of optometrists to population would be 1 to 7,000. It is my opinion that the increasing visual demands on our people, coupled with their increased longevity, require 1 optometrist per 4,000 population.

For example, the American Optical Co. employs a staff optometrist to provide the vision care needed by its 4,000 employees at its main plan. Under the circumstances that prevail there—no charges are made to the employees for services or materials—the optometrist is booked from 6 weeks to 2 months ahead and must receive assistance in dispensing and must refer all special patients such as those requiring contact lenses, visual training, et cetera, to other optometrists.

All branches of the military need more optometrists. Current needs, if filled, would take more than half of the 1965 graduates of all of our schools of optometry.

The critical dimensions of the need for optometrists are well illustrated by my home State of Indiana. Though this State, with less than 3 percent of the Nation's population, has been relatively favorably supplied with optometrists by schools in three neighboring States for most of the century, the State legislature in 1951 mandated the establishment of a new program at Indiana University in 1951, and this program has been additionally supported by annual financial assessment of every 1 of the 600 optometrists registered in Indiana. Although this school has been producing more than Indiana's share of the Nation's optometry graduates for the past 10 years, Indiana's ratio of optometrists to population has continued to decline. A study reported by me in the April issue of the Indiana Journal of Optometry showed the current ratio the lowest in over 50 years, dropping from 1 per 6,000 in 1910 to 1 per 9,500 in 1964. The same study showed an even greater reduction in the ratio of medical personnel providing eye care.

Another study in Indiana, not yet published, shows 4 of our 92 counties with no optometric services whatsoever, 16 with extremely, if not absurdly, high ratios of population per optometrists, and 20 more with clearly inadequate ratios. In other words, 40 percent of the counties in Indiana are, by a most conservative criterion, optometrically understaffed, in spite of the increased supply from its own school.

But 41 of our 50 States have no optometry schools. These 41 States represent well over half of the U.S. population. They have had to depend on the supply from the schools of other States, placing an increasing educational burden on the 9 States which have schools.

This burden rests not only on a small geographic proportion of the Nation's taxpayers, but also on the students, for the out-of-State enrollees have the added expense of out-of-State fees, travel expenses undoubtedly averaging easily 1,000 miles per year per student, and

the typically increased cost of living outside of one's home State. As a result of these circumstances, I am convinced that the average optometry student's annual expenditure for his education equals or exceeds the average for the students of any other profession. The cost is so prohibitive that the great majority of would-be optometry students in the 41 States without schools simply cannot entertain optometry as a career. Every survey of the geographical origin of optometry students has shown a disproportionately high share from "home" communities within a few miles of the 10 schools, for whom the costs of attending are substantially less. In the State of Kentucky, the neighboring State nearest to the Indiana University campus, 39 of the 120 counties are completely deprived of even the most rudimentary forms of optometric services, and the cost of an out-of-State optometric education virtually stifles the hopes of most young Kentucky citizens from trying to fill the need.

At the present time there are only 10 schools, colleges, and universities in the United States with full-scale optometry curriculums. Seven of these ten offer programs involving a minimum of 6 years of university training beyond high school, and the other three have announced plans to go from 5 years to 6 within the next year or two. These programs all represent 2 years of preoptometry university education and 4 years in professional courses leading to the doctor of optometry degree. Their maximally expanded enrollments for this September will provide for only 700 graduates per year, corresponding to a total enrollment of about 2,800 students, about 20 percent increase over the current statistics. The American Optometric Association has predicted the Nation's need for twice our present number of schools and colleges and to accomplish this has created a special committee to assist in negotiations with additional universities for the establishment of at least 10 new optometry curriculums as soon as feasible. Some of the appropriate sites for schools include Colorado, Michigan, New York City, Florida, Georgia, North Carolina, Virginia, and others.

Most educators in professional schools agree that it becomes proportionately more expensive to educate larger classes, particularly in clinical and laboratory instruction, if the quality of education is to remain high. Almost without exception schools in the health care professions, which have increased enrollment to meet the needs for more practitioners, have not been able to provide this proportionate increase in funds. The optimum number of students based on economy and quality of instruction is someplace between 25 and 50 per class.

It is a paradox in current optometric education that with one or two exceptions, institutional resources are negatively correlated with maximum permissible enrollment.

The institutional cost of optometric education is also a deterrent to the development of quality programs. This is evidenced by the fact that in the universities that maintain optometry schools as well as medical and dental schools the tuition for all three categories of students is essentially identical, and substantially higher than the tuition in other academic programs in the same institutions. Comparative cost analyses are difficult to derive, but the following provided me in a memorandum dated June 1, 1965, by L. E. Hull, director of the bureau

of institutional research at the institution with which I am affiliated are indicative:

Data collected by the Bureau of Institutional Research at Indiana University reveal that the average annual cost per student in optometry is $500 more than the average cost for all other students enrolled at the same levels. When the direct costs of instruction (cost of putting the teacher into the classroom) are calculated, the cost per student for optometry is higher than the camparable figure for all the science departments on the Bloomington campus at Indiana University. Only one department in the sciences approaches optometry in these unit costs, optometry costs are more than twice as great as two of the traditional science departments, and more than one-fourth greater than the remaining science departments.

The Optical Society of America has also created a task force group to encourage the establishment of more university and college courses in the various phases of optics, a component part of every optometry curriculum, to help meet the needs for specially trained personnel in optics. I mention the latter only to emphasize the critical need for improved educational opportunity in every aspect of optometry and the incumbent financial hurdles that are involved.

The cost of optometric education is inherently high for the same reasons that the cost of dental and medical education is high; namely, that a significant share of the practical and clinical teaching must be done on virtually a one-teacher-to-one-student-on-one-patient basis. Chalkboards, library, reusable laboratory equipment, and classroom demonstrations are not enough, as might be true to a large extent in the basic sciences, mathematics, and most other academic areas. The individualized learning involved in the development of competence in such phases of optometry as visual analysis, contact lens fitting, ophthalmic dispensing, and detection of ocular pathology is simply not feasible with a notebook and pencil.

H.R. 3141, I understand, was the bill submitted by the Department of Health, Education, and Welfare. It follows the pattern of the legislation which this Department submitted to the 88th Congress. This committee saw fit to amend that bill to include schools and colleges of optometry in those portions dealing with the building of new schools and remodeling, for increased enrollment, of existing schools, and later reported out a special bill which was enacted into law to include optometry schools and colleges in the loan provisions of Public Law 88–129.

All we are asking is that optometry schools and students be accorded the same consideration that is to be given to medicine, dentistry, and osteopathy. Our schools and students are faced with the same financial problems that confront students and schools of medicine, dentistry, and osteopathy, and we ask that we be given comparable treatment in any legislation which this committee sees fit to report. To do otherwise would work a grave injustice on the American people, the vast majority of whom are dependent upon optometrists for vision care.

On Monday of this week, Congressman Clark of Pennsylvania introduced H.R. 8805, and Congressman Hull of Missouri introduced 8811. Both of these bills authorize the same benefits to optometry schools and students that are given to schools of medicine, dentistry, and osteopathy. Earlier in this session, Congressman Fogarty of Rhode Island introduced H.R. 7385, Congressman Bennett of Florida

introduced H.R. 8751, and Congressman Pepper of Florida introduced H.R. 7806, and also Congressman Thompson of Wisconsin introduced H.R. 8692.

H.R. 3141 can be amended to conform to these other bills, and there is attached to this statement a list of appropriate amendments.

If every optometry school applied and received a grant for improvement of quality and for maximum scholarship utilization, the total optometric portion in the first year would be $765,000 at maximum. This is only half the amount appropriated by the Indiana Legislature at its last session for the Indian University optometry program, a substantial portion of which was for capital expenditures.

When I learned I was to appear here to testify, I wired the other nine optometry schools and colleges for expressions on the need for funds to improve the quality of optometric education and for scholarships. All responses indicated an intense need. Here are a few samples extracted from their replies:

From the dean of the College of Optometry at the University of Houston:

Our present facilities do not permit the full involvement in optometric specialties. There is also a great need to increase the research facilities and to institute a graduate program. The need for qualified instructors in optometry is extremely great. Financial and other assistance to students who plan to enter the field of optmoetric education is of vital importance.

The need for student aid is great. Students at our college have been forced to drop out for a lack of financial support. Other students must work so many hours that academic status is endangered. Two independent studies, one by the office of loans and scholarships and one by my office, arrived at the same amount of loan money needed by optometry students. The results of these two studies indicated that there is a need for some $60,000 in loan money per year.

The College of Optometry at the University of Houston has not been able to participate in the health professions student loan program because of the inadequate physical space and insufficient number of personnel in our office of loans and scholarships to handle the tremendous load created by the recent rapid growth in our university. Our college has been granted permission to use money contributed by optometrists to our better vision program as matching funds for NDEA loan money.

From the dean of the Massachusetts College of Optometry:

Please be advised that the faculty committee on scholarship aid has found it necessary to deny eligible candidates for scholarships because of lack of funds.

Approximately one-third of the total enrollment asked for financial aid. Unfortunately only one-third of the one-third were able to benefit from our scholarship funds. The amount of money required to satisfy the needs of the applicants fell far short of the needs.

Financial aid from a Government scholarship program certainly would make it possible for the students to devote more time to their studies instead of seeking employment to supplement their financial needs. We can only stress that there is a crying need for scholarships for optometric students.

As to the improvement of the quality of optometric education, the Massachusetts College of Optometry has purchased a new site for the erection of a new building. It was puchased at a cost of $220,000. We would certainly benefit, as would the entire profession of optometry, were this college to have its actual plans for the new building erected soon. Unfortunately we find it very difficult to start actual plans for the new building due to lack of funds. If there was Government-sponsored legislation to assist schools of optometry in their efforts to improve the quality of optometric education, it would be beneficial not only to the colleges, but to the students who will become the professionals of tomorrow.

From the dean of the College of Optometry of Pacific University:

Need for scholarships:

1. Pacific's allocation for health professions student loan program for 1965–66 is $56,000.. Requests for loans for this period, based on documented need, totaled $90,000. These requests did not include those of the entering class of 55 students.

Need to improve optometric education:

1. The 1965–66 budget request for the College of Optometry, Pacific University, based on minimum needs, was $22,000 in excess of available funds.
2. Proper implementation of new 4-year professional programs will require larger budgets for all schools.
3. Many of the ideas that developed from the national curriculum conference such as learning resources center and programed instruction required additional funds.

This conference, attended by representatives of every school as well as educators outside the profession, including two representatives of the Public Health Surgeon General, was held here in Washington last month. It was my privilege to attend.

From the dean of the Southern College of Optometry:

The Southern College of Optometry has experienced a great deal of difficulty in employing faculty personnel with excellent backgrounds, due to three major reasons. The first reason being a simple supply and demand situation in which there are not enough graduate degrees being granted each year to supply the 10 schools and colleges of optometry with adequate personnel. We here at Southern have recognized this need and are attempting to interest our students in graduate education to the point that the college itself is matching any assistance which might be available to the student upon entering his graduate education program. As I see it, there is a need for graduate assistance programs from the Federal Government which may be in the form of grants and certainly if this cannot be arranged there should be ample loans available to the prospective student over the period of time which he intends to remain in graduate school.

There is a real need for student loans or scholarships among the optometric students at this institution. The school is being forced to curtail its loan program which was devised 5 years ago, in which it countersigned notes at local banks for students who needed money to continue their education. We, at this time, have had to place in reserve, equal amounts of the loans from our capital fund. I am most happy to state that we do not have any delinquents among this group of loans; however, it does tie up a considerable amount of our capital which is needed for current operation. Loans which are made from the Federal Government through this institution amount in dollars and cents to approximately 50 percent of the valid request for such loans. At this time, we have on hand $212,000 of applications which meet the requirements for the loan needs; however, we have been able to secure only $122,205 to meet these needed and acceptable requests.

From the office of the president of Pennsylvania College of Optometry:

Money and scholarships we need.

At the Pennsylvania College of Optometry, additional funds are sorely needed to advance its educational program. Because of limited funds, the college has operated for the past 5 years with one person attempting to serve as both president and dean. Also, lack of adequate funds causes the college to employ too few teaching personnel, especially full-time faculty members. Equipment and apparatus needs are not being fully met.

The demand of students for health professions loans is strong evidence of the need of scholarships at the Pennsylvania College of Optometry. A very recent survey of 170 underclass students planning to return in September 1965, revealed that an aggregate of $159,000 would be borrowed if the funds were available.

From the dean of the School of Optometry, University of California:

I hope this reaches you in time. Unfortunately, the data below cannot be documented—lack of time.

If funds should become available, we could improve the quality of our education.

Right now about 50 percent of our students work at least part time. If scholarships should become generally available, this would mean that the students could give more time to their studies and hence would improve education.

Part of the problem is time rather than cost. Technically our students could complete preoptometry in 2 years, but, at the moment, the entering class comes in with an average of just over 100 units. At 30 units per year this comes to 3-plus years. Optometry will probably become a 4-year program everywhere and hence an optometric education will involve 7 years. This is a comparatively long nonproductive period for young men. Scholarships would increase enrollment both in numbers and quality.

According to the cost accountant of the American Optometric Association, to set up a college plant for 400 students would require approximately $5 million. This includes equipment and ground for an average campus. Operating expenses annually would be 25 percent of that amount or $1.5 million. The most we could expect in student fees would be approximately 50 percent of the operational funds required. The balance must be made up in grants.

The U.S. Office of Education has reported that, in 1959–60, tuition and fees from students (but not charges for rooms, meals, books, et cetera) accounted for only 12.3 percent of the educational and general income at publicly controlled institutions, and 41 percent at the privately controlled institutions. The percentage is considerably higher at optometric institutions of learning.

The annual report of our Council on Optometric Education to the profession for 1963–64 contained the following recommendation:

The council recommends that study be given and plans made to establish endowment funds for our schools, and that all optometrists be called upon to support their alma maters, spiritually, financially, actively.

The council recommends that a national campaign be inaugurated to raise funds by public contribution for the schools. The need for optometrists is of great public concern. The need for financially strong optometric schools is also a public problem.

In its oral report to the American Optometric Association Board of Trustees this council reported a minimum need of $100,000 annual operating subsidy for each school. It asked that $23 million be raised for buildings and teaching assistance.

According to the council, in several schools, faculties have been carrying 1½ to 2 times the normal workload for substandard pay, accepting these conditions because of their dedication to the school or the profession.

In one school the maximum payroll for a full-time professor is $7,000. At some of the other schools professors receive $8 per hour while in the classroom—and there is no remuneration for preparation, grading of papers, and like work. Laboratory instruction is at a lower rate with no tenure, no side benefits, no sabbatical leave.

Several schools are seeking new deans. The appropriate degree for such a position is a doctorate in physiological optics. However, because of our inability to match salaries with industry and scientific institutions for these Ph. D.'s, it is difficult to attract them into optometric education.

A U.S. Office of Education report on salaries for higher education in 1962–63, reveals that professors in liberal art colleges received an average of $10,999 in public institutions, and $9,190 in private

colleges. Professional schools, to compete with them and the attractions of a private professional practice, must pay considerably more to obtain and retain their faculties.

In summing up, students of the rank and caliber needed to provide the future intellectual and scientific leadership for the profession of optometry, the science of physiological optics and vision research, will be paying a completely unreasonable premium to enter optometry when scholarship funds and attractive educational facilities are available to them in the three health professions now included in this bill.

All we ask is that students desiring to study optometry have equal encouragement and resources and not be siphoned away to other fields requiring comparable abilities, character, and industry. This gives the student freedom of choice as to the field he desires to enter.

Congress has in two separate instances recognized our profession along with medicine, dentistry, and osteopathy by including optometry in the construction phases of the Health Professions Educational Assistance Act early in the 1st session of the 88th Congress and also by a separate bill (the Williams-Roberts Act) in the 2d session of the 88th Congress.

We are merely asking the committee to be consistent and follow the precedents already established.

It is distinctly in the public interest that our profession should attract some top-ranking scholars who will become contributors to professional scientific and intellectual advancement in the all-important field of vision.

Thank you for this opportunity to appear before you. If you have any questions, I will be more than happy to attempt to answer them.

(The attachment to Dr. Hofstetter's statement follows:)

AMENDMENTS FOR H.R. 3141

Amend the title of the bill by inserting in the second line after the word "dentistry" the word "optometry."

Page 2, line 2, after the word "dentistry" insert the word "optometry."
Page 2, line 8, after the word "dentistry" insert the word "optometry."
Page 2, line 14, after the word "dentistry" insert the word "optometry."
Page 2, line 20, after the word "dentistry" insert the word "optometry."
Page 3, line 21, after the word "degree" insert the words "doctor of optometry or an equivalent degree."
Page 4, line 2, after the word "dentistry" insert the word "optometry."
Page 4, line 21, after the word "medicine" insert the word "optometry."
Page 6, line 18, after the word "dentists" insert the word "optometrists."
Page 6, line 20, after the word "medical" insert the word "optometric."
Page 6, line 22, after the word "medical" insert the word "optometric."
Page 6, line 25, after the word "medical" insert the word "optometric."
Page 7, line 8, after the word "medical" insert the word "optometric."
Page 8, line 7, after the word "osteopathy" insert the word "optometry."
Page 8, line 11, after the word "osteopathy" insert the word "optometry."
Page 11, line 2, after the word "medical" insert the word "optometric."

The CHAIRMAN. Doctor, thank you very much for your statement and presentation.

Are there any questions by members of the committee? Mr. O'Brien?

Mr. O'BRIEN. Do I understand correctly that if the amendments you propose are adopted, that the cost in the first year will be $785,000?

Dr. HOFSTETTER. That is my computation of the maximum cost for both the scholarships and the subsidy to the schools, if they all apply.

Mr. O'BRIEN. Thank you.

Dr. HOFSTETTER. That is based on enrollment for this coming year.

The CHAIRMAN. Any further questions?

(No response.)

The CHAIRMAN. Doctor, the original Health Professional Act included your profession, for construction.

Dr. HOFSTETTER. That is right.

The CHAIRMAN. The proposed bill, H.R. 3141, would continue that authority.

Dr. HOFSTETTER. That is correct.

The CHAIRMAN. The original act did not provide for loans.

Dr. HOFSTETTER. That is correct.

The CHAIRMAN. We reported the bill in August. It passed the House in September last year, providing authorization for loans.

Dr. HOFSTETTER. That is correct. I am not sure about the dates, but the statement is otherwise correct. It would be about that time.

The CHAIRMAN. September 23. Apparently on September 30 a Senate bill—I do not know what the number of it is or was, S. 2180——

Dr. HOFSTETTER. The Williams bill.

The CHAIRMAN. Apparently on September 30 we called up the Williams bill and passed it in lieu of H.R. 8546, and that became law on October 13, 1964. Obviously you have not had any experience.

Dr. HOFSTETTER. Yes, we have. We have had experience for a half academic year.

The CHAIRMAN. Did you receive funds for loans?

Dr. HOFSTETTER. Yes.

The CHAIRMAN. How many loans?

Dr. HOFSTETTER. I would have to get that information. I do not know. But I think all but one of the schools participated. Nine of the schools participated, I am quite certain.

The CHAIRMAN. Pardon?

Dr. HOFSTETTER. Nine of the optometry schools participated in the second half of the last academic year.

The CHAIRMAN. Nine of the schools?

Dr. HOFSTETTER. Nine of the ten schools.

The CHAIRMAN. You have 10 schools.

Dr. HOFSTETTER. Right.

The CHAIRMAN. Are there any applications for construction grants?

Dr. HOFSTETTER. There have been three applications and two have been approved, and the third is under deferment for further information, and I do not happen to know how many letters of intent have been filed.

The CHAIRMAN. Doctor, I wish you would supply for this record how much you are able to obtain, you would estimate, to meet the needs and requirements for construction for loans, scholarships, special improvement grants, and break them down.

Dr. HOFSTETTER. By schools and by types?

The CHAIRMAN. Well, I do not know about schools.

Dr. HOFSTETTER. But by categories.

The CHAIRMAN. I think that might be too much for you. But the estimated requirements, the total.

Dr. HOFSTETTER. For?

The CHAIRMAN. For the needs, for grants, and for these other categories for 1967, 1968, 1969, and 1970.

Dr. HOFSTETTER. Should that be by calendar years or by fiscal years?

The CHAIRMAN. Fiscal years. And supply that for the record, will you please, sir?

Dr. HOFSTETTER. Yes, sir; I shall get that very quickly.

(The information referred to follows:)

AMERICAN OPTOMETRIC ASSOCIATION,
St. Louis, Mo., June 18, 1965.

Hon. OREN HARRIS,
Chairman, Subcommittee on Public Health and Welfare, Interstate and Foreign Commerce Committee. U.S. House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE: This letter is in response to your request for specific estimates of the maximum cost to include the optometry schools and colleges in H.R. 3141's three sections in which the schools were not included in the bill originally proposed.

For the 4 fiscal years 1966–67, 1967–68, 1968–69, and 1969–70, the total cost for scholarship grants as provided for in the formula specified in the bill would be $1,568,000. For the same 4-year period, the maximum cost for the basic improvement grants would total $4,404,000. These are the two maximum sums of money that would be represented by inclusion of optometry in these phases of the bill.

The estimated cost for the continuation of construction grants for the same period is $9,116,055. The maximum outlay in student loans during the 4-year period is $4,162,000. The maximum cost for the special improvement grants would come to $3,365,000. We understand, of course, that these special improvement grants would not be automatic in the bill, but would represent grants which must be applied for and justified.

The following table summarizes the cost year by year in each category for the 10 accredited schools and colleges of optometry:

	Fiscal years				
	1966–67	1967–68	1968–69	1969–70	Total
Federal:					
Construction	$2,236,055	$2,810,000	$1,240,000	$2,830,000	$9,116,055
Student loans	885,000	994,000	1,109,000	1,174,000	4,162,000
Scholarships	241,000	362,000	457,000	508,000	1,568,000
Basic improvements	920,000	1,103,500	1,140,000	1,234,500	4,404,000
Special improvements	550,000	835,000	1,000,000	980,000	3,365,000
Total	4,832,055	6,104,500	4,952,000	6,726,500	22,615,055

I sincerely appreciate your giving me the opportunity to spell out in detail the critical needs for support of better optometric education, particularly the need to make optometric education available to young citizens in every State in the Union.

Sincerely,

HENRY W. HOFSTETTER, O.D.
Director, Division of Optometry, Indiana University.

The CHAIRMAN. Thank you very much. We are glad to have your testimony.

Dr. HOFSTETTER. Thank you.

The CHAIRMAN. Mr. Charles W. Bliven.

Mr. Bliven, I believe you are the executive secretary of the American Association of Colleges of Pharmacy, and you have with you Dr. Joseph Sprowls, chairman of the executive committee and dean of Temple University School of Pharmacy.

STATEMENT OF CHARLES W. BLIVEN, EXECUTIVE SECRETARY, AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY; ACCOMPANIED BY DR. JOSEPH B. SPROWLS, CHAIRMAN, EXECUTIVE COMMITTEE, AND DEAN, TEMPLE UNIVERSITY SCHOOL OF PHARMACY

Mr. BLIVEN. That is correct, Mr. Chairman.

The CHAIRMAN. Very well, you may proceed.

Mr. BLIVEN. My name is Charles W. Bliven. I am executive secretary of the American Association of Colleges of Pharmacy, and I present the statement in this capacity. Before assuming this office I served for 14 years as dean of the School of Pharmacy of George Washington University, Washington, D.C.

I appear before you in behalf of the membership of the American Association of Colleges of Pharmacy, which consists of 74 schools and colleges of pharmacy. All of them are nationally accredited. Seventy-three of our member schools are located in 44 States and the District of Columbia; the remaining school is located in Puerto Rico. Approximately 1,100 teachers are engaged in the instruction of some 12,000 undergraduate and 1,400 graduate students enrolled in our schools.

The curriculum leading to the undergraduate professional degree has required a minimum of 5 years since September 1960. Two of our member schools offer a required 6-year curriculum, and two others offer this longer program on an optional basis in addition to the minimum program. In the 5-year program at least 3 years of work in the professional subjects are required in addition to a 2-year basic science program. In the 6-year curriculum at least 4 years are mandatory beyond the 2 years of science.

The objective of the American Association of Colleges of Pharmacy is the promotion of education and research within the member institutions. Our association is a nonprofit organization.

I appear before you in support of H.R. 3141, the "Health Professions' Educational Assistance Amendments of 1965." This legislation would extend the program for the construction of teaching facilities for students in schools of pharmacy and in other health professions. In addition it would extend the student loan provision of the Public Health Service Act for students of medicine, dentistry, and osteopathy; provide for scholarships to needy students in these professions; and authorize grants to improve the quality of the schools of this group.

While we appreciate the inclusion of schools of pharmacy in the construction portion of the legislation, we ask that students of pharmacy enrolled in the last 3 years of our schools and colleges of pharmacy be included in the student loan and the scholarship grant portions of the bill.

Our member colleges have the responsibility of graduating an adequate number of pharmacists at both the undergraduate and graduate levels to meet not only the replacement needs of the profession (currently 4,300 undergraduates annually on a replacement rate of 3.5 percent per year) but also the demands of our rapidly expanding area of the health sciences. A rather constant pharmacist-to-population ratio of 67 to 100,000 has existed from at least 1920 until recently.

If this ratio is used in the projection of manpower needs, schools of pharmacy will need to produce an average of 6,600 graduates annually during the period 1965–70, almost twice as many as are currently being graduated. During 1970–75, the average annual number of graduates must be increased to 7,200 and to 8,000 during 1975–80 if the 67-to-100,000 ratio is to be maintained. (See table C.)

The 67-to-100,000 ratio is based on the 1960 population of 180 million and 120,000 pharmacists. Information compiled by the U.S. Public Health Service [1] shows that as of 1962 there were 123,057 licensed pharmacists residing in the state of registry. On the basis of this figure and a population of 188 million, the current pharmacist-to-population ratio is 65.9 to 100,000.

This, as I recall, is approximately 1 to 6,250 population.

Approximately 90 percent of our professional personnel are practicing in the community pharmacies throughout the country. The remaining 10 percent are engaged in the many other areas of the profession: In the pharmacies of our hospitals; in the control, research, or product development laboratories of the manufacturing plants; as medical service representatives to the physicians; in our educational programs; in Government; and in the Armed Forces. The schools of pharmacy are making every effort to respond to the demands for personnel from all of these public health areas. The educational program in pharmacy provides our graduates with an excellent background in the basic sciences as well as in the professional courses. For this reason allied health fields are utilizing an increasing number of our graduates. To provide an adequate number of pharmacists for the profession and the allied health fields, our schools and colleges of pharmacy will continue to need financial assistance.

Since 1957 about 20 schools have been housed in new buildings, either separate or shared, and about 40 have acquired additional space. Since 1947 about 35 schools, approximately one-half of our total number, have acquired new facilities. In spite of this substantial building program during the past several years, a recent survey—with 59 of the 74 schools responding—shows that 35 schools are planning a total of 39 construction projects during the 10-year period ending June 1974. The total cost of the projects is estimated at $53 million with approximately one-half of this amount, $27.4 million, being required for projects devoted to teaching facilities for the last three classes of the undergraduate curriculum. Of course, it is not possible to state at this time if all the projects involving undergraduate teaching facilities will be eligible for consideration for funds under the legislation. But, as stated before this committee in 1963, the needs of schools of pharmacy appear to be the replacement or rehabilitation of existing structures and the expansion of some of them to meet area needs. There does not appear to be a need for the establishment of new schools within the next few years.

We realize, however, that physical facilities alone will not enable schools of pharmacy to meet their public health responsibilities; qualified students in sufficient number and properly trained staff members are equally essential to the education of tomorrow's pharmacists. All

[1] Peterson, P. Q., and Pennell, M. Y., "Health Manpower Source Book 15, Pharmacists," PHS Publication No. 263, sec. 15, p. 3, U.S. Government Printing Office, Washington, D.C.

of these needs have been given priority in the thinking and planning of our college administrators.

There continues to be a need for financial aid to students of pharmacy in order that our schools can supply the essential number of well-qualified graduates. The inclusion of our students under the student loan and scholarship grant provisions of the bill would aid in this responsibility as the increased possibility of financial aid offered through these provisions would have a salutary effect on the number of students undertaking the study of pharmacy.

Two sources of funds through pharmacy foundations are now available to our students. The American Foundation for Pharmaceutical Education makes available $600 annually to each school for scholarship purposes. Since 1942, $594,202 has been awarded to 2,647 students. Since 1952 the John W. Dargavel Foundation, founded by the National Association of Retail Druggists, has made loans totaling $401,830 to 628 pharmacy students. During the 1963–64 academic year, 169 loans averaging $305 were made. Currently, loans are limited to $350 a semester, but qualified students may receive two such loans during the year. In addition the Dargavel Foundation provides annually each school with $200 of scholarship funds. This program was initiated at the beginning of the current academic year.

Our students are eligible for loans under the National Defense Education Act but the statistics relative to their participation in this program are not available.

While these sources are most helpful, they do not meet the full need for funds. In 1963 almost half of the deans of our schools reported an unmet need for additional financial assistance among their students.

An increased number of well-qualified students is essential not only in the undergraduate curriculum but also in the graduate program where our future teachers and research personnel are trained. The excellent graduate programs developed by many of our schools is a vital part of the educational program for pharmacy, and the facilities for such advanced training must be expanded in the years ahead.

In a survey conducted in September 1963, 43 schools—with 72 reporting—indicated a shortage of 83 teachers. For the academic year 1965–66, 65 of our 74 member schools reported a need for approximately 135 teachers as replacements or to fill new positions as compared to 120 for 1964–65. Of this number about 100 must have a Ph. D. degree. With less than 100 graduates receiving this degree during the current academic year (there were 83 in 1964) and with about one-half of this number taking positions in industry, a shortage of teachers will prevail again next year.

Federal assistance in the form of health research facility grants and research grants from the National Institutes of Health has had a pronounced beneficial effect on our graduate programs and hence on the number of teachers for our schools and research personnel for the pharmaceutical industry. In fiscal year 1964 grants totaling $820,000 were awarded to five schools of pharmacy. A recent survey—with 59 of our schools reporting—showed that for the 10-year period ending June 1974, funds in excess of $20 million, based on the total cost of construction, will be required for new research facilities.

During the academic year 1963–64, schools of pharmacy received in research grants $6,619,000, representing an increase of about 18 percent over the amount received during the previous year. It is estimated that about one-half of the funds were utilized for research in the important areas of cancer, metal health, and cardiovascular diseases.

During fiscal year 1964, Public Health Service supported research projects in schools of pharmacy totaled 182 with a dollar value of $2,834,000. Since 1961 the anual growth rate of the amount of support has been 44 percent; during the last 10 years the dollar value has increased a hundredfold.

The figures on research facility needs and research funds are given to indicate the continuing increased interest and activity of schools of pharmacy in fundamental and applied research. We are grateful for the support for research available through the Federal programs, but we seek greater support for our undergraduate programs, both for teaching facilities and for student aid. We deem this support to be essential to the continued supply of well qualified graduates in pharmacy, not only for the distribution of medicine, but also for the ancillary areas of the health profession as well as for teaching and research.

I believe that will terminate my statement, Mr. Chairman, and with your permission, Dean Sprowls may have supplementary remarks that he wishes to give.

(The tables attached to Mr. Bliven's statement follow:)

TABLE A.—*Undergraduate enrollment in continental U.S. schools of pharmacy, 1958–64*

Year	Last year	Second from last year	Third from last year	Total
1958–59	3,901	3,880	4,492	12,273
1959–60	3,645	3,872	4,982	12,499
1960–61	3,691	4,075	5,823	13,589
1961–62	3,906	4,784	[1] 2,137	10,827
1962–63	4,484	[1] 2,004	4,145	10,608
1963–64	[1] 2,145	3,756	4,390	10,291
1964–65	3,557	3,977	4,427	11,961

[1] The small enrollment in this class is the result of the transition from the 4 to the 5-year program in 1960 by those schools not already on the longer program.

TABLE B.—*Graduates from undergraduate curriculums of continental U.S. schools of pharmacy, 1958–65*

Year:	*Graduates*
1958	3,683
1959	3,686
1960	3,497
1961	3,438
1962	3,699
1963	4,163
1964	2,195
1965	[1] 3,378

[1] Estimated.

TABLE C.—*Average annual number of pharmacists, and requirements for replacements, new entrants, and total need for pharmacists in the United States for 5-year periods, 1960–80* [1] [2]

Period	Average annual number of pharmacists [3]	Requirements		Total
		Replacements [4]	New entrants	
1960–65	122,000	4,300	2,000	6,300
1965–70	132,000	4,600	2,000	6,600
1970–75	142,200	5,000	2,200	7,200
1975–80	153,600	5,400	2,600	8,000

[1] Puerto Rico is not included.
[2] Based on Bureau of Census population projection of February 1964, series B, and on the population increase as being linear.
[3] Based on 1960 pharmacist-to-population ratio of 67:100,000.
[4] Calculated at 3.5 percent of number of pharmacists.

Dr. SPROWLS. Thank you.

Mr. Chairman, I appreciate the opportunity we have to appear before this committee today to express our support of H.R. 3141, and to request that it might be amended to provide some of the support for students in terms of scholarships and loans which are available to others of the health professions. I am going to make a few brief remarks with respect to the changes in the practice of pharmacy and how they relate to student needs.

I do not think it is necessary for me to say very much about all of the activities in which the pharmacist engages and how these relate to the health care of the public, because I think we are all close enough to pharmacy to understand this.

We all know our community pharmacist pretty well and know what he does. On the other hand, I think we do most clearly identify the pharmacist with the dispensing of prescriptions, and I would like to cite a statistic on this. In 20 years the volume of prescriptions in the United States has increased by 400 percent, and it is increasing each year at the rate of about 6 percent.

To put this in terms of figures, last year the pharmacists of this country dispensed 900 million prescriptions, and the increase over the year before was 53 million. Yet there has been practically no change in the number of pharmacists in the United States in 20 years.

Now, I think it is to the credit of pharmacy that we have made internal changes which have made it possible for the pharmacy profession to do this very greatly increased profesional job, shall we say, without an increase in the numbers. But it cannot continue.

Dr. Bliven has indicated that during this period, during 20 years at least of this period, the ratio of pharmacists to population has remained fairly constant, and that it is now falling behind, and that we would need to graduate about twice as many students as we now do to maintain that ratio which has been constant for so long. Therefore we feel that we must increase the student output not only for replacement purposes, but also to meet the demand of an increasing population, and beyond that, to increase the growing volume of pharmaceutical service which is being provided.

Now, none of this relates to additional services which are increasing in the pharmacy area. I would point particularly to hospital phar-

macists, where it is estimated that the need is in three times as great a ratio as the need for community pharmacists, that is to say the replacement need is three times as great as it is for community pharmacists of the very rapid growth in the function of hospital pharmacy.

I would also point out that we have an increased demand for pharmacists in public health occupations, civil health occupations. We also have an increased demand for pharmacists in research and in the manufacturing phase of our profession.

Therefore, we believe that we need the continued support in terms of grants for construction. We believe that we also need that support which would come through support of students which in turn would help to recruit students and keep them enrolled.

We again appreciate the privilege of making this statement, sir.

The CHAIRMAN. Thank you very much, Doctor, for your statement to go along with that of Mr. Bliven.

Are there any questions?

Mr. O'BRIEN. Mr. Chairman, I have one. I am not sure I understand table B. You said that until recently the percentage of pharmacists to total population was fairly stationary, but I look at 1963 and see 4,163 graduates—1964 you tell us is an extraordinary year and that cannot be used for comparison. But in 1965 we are down to 3.378. That is nearly a 20-percent reduction.

Dr. SPROWLS. Yes, sir.

Mr. O'BRIEN. Is that not a rather startling drop?

Mr. BLIVEN. That is the estimated figure for 1965.

Mr. O'BRIEN. I understand.

Mr. BLIVEN. In 1959 we had one of our largest undergraduate entering classes, and I think that is reflected. It is reflected in the graduating group in 1963, which is the last 4-year graduating class, graduates from the 4-year program. From that time on we have had a lessening of admissions. It is beginning to pick up again now, but not significantly.

Dr. SPROWLS. If I may I would say significantly in that of the eight districts of the United States, six have shown an increase in enrollments this year, so I think that is a significant increase. I think always when you make these changes in an educational program you has a few years of readjustment which is to be expected.

Mr. BLIVEN. That is correct.

Mr. O'BRIEN. Thank you.

The CHAIRMAN. Any further questions?

Mr. MACKAY. Mr. Chairman, I would just like to say that my experience in my own district bears out the testimony we have heard here in terms of the need of the students for aid in this important profession throughout our community. I am very impressed with the conjunction of this testimony with what I have recently learned in my own district.

Mr. BLIVENS. Yes, Mr. Chairman; many of the Southern States show a pharmacist to population ratio much less than the average of 65.9 per 100,000. I think Georgia would be included in that group.

The CHAIRMAN. The original act included pharmacy for construction.

Mr. BLIVEN. For construction.

The CHAIRMAN. But it did not include it for loans.

Dr. SPROWLS. That is correct.

The CHAIRMAN. And you are asking that schools of pharmacy be included in this legislation for construction, for loans, for scholarships. Anything else?

Mr. BLIVEN. No, sir.

The CHAIRMAN. You do not need any of the special improvement grants.

Mr. BLIVEN. We will be happy with loans and scholarships at the present time. We could use additional money, but we are hopeful that we can aid our students at this time, and then build as we go along and strengthen our undergraduate programs as best we can, and we might be back at a later date.

The CHAIRMAN. It is a little bit puzzling to me that the Department in proposing the administration program did not recognize the need for pharmacists in order to have a well-balanced program. Obviously, if you are going to have more doctors and more dentists, more osteopaths, particularly when they have got to call for prescriptions there will obviously be a need for additional pharmacists to supply the increased demand. Maybe we will get the answer to that before these hearings are over.

Thank you very much. We appreciate your presentation here today.

Mr. BLIVEN. Thank you, Mr. Chairman.

Dr. SPROWLS. Thank you.

STATEMENT OF DR. DOUGLAS M. SURGENOR, DEAN, SCHOOL OF MEDICINE, STATE UNIVERSITY OF NEW YORK AT BUFFALO

The CHAIRMAN. Dr. Douglas Surgenor. I believe you are the dean of the Medical School of the State University of New York at Buffalo.

Dr. SURGENOR. That is right, sir.

Mr. Chairman, I submitted a prepared statement which I hope can be included in the record. I do not intend to read it.

The CHAIRMAN. Very well, we shall be glad to have your statement included in the record and you may proceed.

(Dr. Surgenor's statement in full follows:)

STATEMENT OF DR. DOUGLAS M. SURGENOR, DEAN, SCHOOL OF MEDICINE, STATE UNIVERSITY OF NEW YORK AT BUFFALO

Gentlemen, I come before you in a dual role. First, as dean of the Medical School of the State University of New York at Buffalo, and, secondly, as a representative of the group of health schools in Buffalo which comprise the new university health center. These schools include, besides the School of Medicine, Schools of Dentistry, Nursing, and Pharmacy.

Our medical school in Buffalo is almost 120 years old. During this long history the school has provided most of the physicians who have practiced medicine in the western New York area. Three years ago we merged into the State University of New York and with the strong backing of the State university who have begun to plan for exciting new changes and developments in health education in Buffalo. The key to our planning is the development of a new health center. This grows out of our belief that the individual members of the health team—the dentist, the nurse, the pharmacist, and other professionals should be educated side by side with the physician so that they will better be able to work together later in providing the finest quality of health care in the community.

H.R. 3141, the bill to amend the Public Health Service Act, has several features which are important to us in Buffalo and I am sure are important to many other

medical and health schools which are in the process of growth and change. I would like to call attention, briefly, to three of these features.

In planning our new facilities, which we expect to be completed by 1970, we see the change to greatly expand the output of students in the health professions to serve the needs of our area and of the country at large. Accordingly, when this new health center is completed we expect to graduate 150 physician, 120 dentists, 120 pharmacists, and 150 baccalaureate degree nurses each year. This corresponds to an increase in these various groups of students of 50 percent over our present levels. It is obvious, of course, that this can be done only if adequate facilities are provided and it is in this context that I would respectfully point out to you the urgency of extending the construction program for medical, dental, and other health profession schools which is a part of this bill. Unless we can hope to receive major funds for our construction it seems very likely that we will be forced to reduce our planned output of professional students to something less than the 50 percent increase we now plan.

The plan to increase the number of physicians and dentists whom we can train at Buffalo can only succeed if we can increase the number of qualified students who wish to enter these and the other health professions in the coming years. This brings me to my second point which has to do with the importance of providing scholarships and loans to medical and dental students. I can speak personally of the difficult financial problems of medical students. Over the past few years the plight of the medical student has deteriorated while other careers, particularly in the biological sciences and in the space sciences, have become increasingly attractive. We are now attempting to reverse this trend and to attract more students into the health professions, but the road is a long one and it is uphill all the way. As an example of the competition, a recent national survey showed that 85 percent of all graduate students in the health science fields receive nonrefundable grants averaging $2,700 a year.

Finally, I would like to comment on the improvement grant provisions of H.R. 3141. Improvement of the quality of an instructional program is a constant and difficult problem. It is constantly with us because we must try to keep pace with the growth of knowledge from the research laboratories ,and this place our students in the best possible position to put new knowledge effectively to work in their daily practice. It is difficult to improve quality because this involves altering the curriculum, bringing in new faculty, new techniques, and new approaches.

At Buffalo, we find that our resources, despite excellent support from the State University of New York, are completely committed to catching up in faculty strength for our basic program, and to related matters, with the result that we simply cannot fund new and important curriculum changes that the faculty has already agreed to. For example, we have developed a plan to provide a better educational transition between the basic science years and the clinical years of the medical curriculum. Tentatively entitled, "mechanisms and manifestations of disease," this course involves a new approach in which a team of physicians and scientists will introduced the medical student to the basic principles of clinical medicine. It is this kind of improvement in the curiculum which would be greatly expedited by the support envisioned in the bill. I could name several other areas of urgent need in my school which would also be aided by new Federal support.

H.R. 3141 represents an important extension in the close relation between the Public Health Service and the medical schools. The key to better health care for the American people lies in the education and training of the men and women who will form the health team. With an adequate educational base the health needs of the public can be met; without doctors, nurses, dentists, and other health personnel in adequate supply, no sound health program can be mounted.

Dr. SURGENOR. Mr. Chairman, I would like to make just two brief points amplifying some remarks that are in my statement. The first of these concerns the present level of professional education in the medical schools of the country. Most medical schools are operating very close to or at their limit of capacity.

In my own school at Buffalo part of our facilities were designed for 100 entering medical students, and we are taking 100 entering medical students; but meanwhile, in addition to that, since the building was built we have had to accept very large additional respon-

sibilities for training other health personnel, particularly a large Ph. D. training program in the basic medical sciences, and very significant numbers of occupational therapists, physical therapists, and medical technologists, all of these being under the faculty of the school of medicine.

I can also broaden that point just a little bit by commenting on the medical schools in the State of New York. As you probably know, there are 10 medical schools in New York State, 7 of which are private and 3 of which are under the State university system. The deans of those schools meet together from time to time to discuss common problems of which the number of physicians is a very urgent item on our agenda.

In 1964 the 10 schools in the State of New York turned out 942 physicians, still far short of the needs of the State. While these 942 physicians were trained in the State schools, New York State provided about 400 more students who had to go out of the State of New York to get their medical education, so that New York is a debtor State in the sense that we do not have the capacity to train all the physicians that we need.

But I would stress the fact that every one of these 10 schools, to my personal knowledge, is taking in a full number of students according to their present capacity. Some of them I know are adding to their capacity, but at the moment I believe this reflects the true statement of the situation.

My second point, Mr. Chairman, is to emphasize the urgent needs of the provisions of H.R. 3141 if we are going to keep up with the task of training the health personnel we need for the next decade or two, and the fact of the matter is that we urgently need the support of the Federal programs if we are going to mount expanded outputs.

I can illustrate this best by some of the information from our own institution. As I have indicated in my statement, we have set upon a program of designing a health center in which we hope to bring together the training of the various members of the health team of the future, believing that they ought to be educated side by side if they are going to work side by side later on. Very briefly, our plan conceives of a 50-percent increase in the output not only of physicians but of dentists, pharmacists, and bachelors degree nurses in this new expanded program.

Now, none of this is in any application or even in any letter of intent, although the plan is now firmly established and will be in much more definite shape in the next 2 years. The point I want to make is that the output of approximately 50 additional physicians a year and 130 additional dentists, pharmacists, and nurses from our single unit of the State University of New York depends to a very large measure on the kind of support that we hope we can get, especially for construction, from H.R. 3141.

Thank you very much.

The CHAIRMAN. Doctor, thank you very much.

Mr. O'Brien, any questions?

Mr. O'BRIEN. I feel, Mr. Chairman, that as a native of Buffalo I would like to congratulate the doctor on these exciting things that are happening in Buffalo. I notice that you referred to the health team working side by side, and that you feel this should be continued.

Would you see any objection to the extension of the loan and the scholarship provisions to the pharmacists?

Dr. SURGENOR. We are very proud of the fact that we have at Buffalo a very distinguished school of pharmacy, and I would certainly support that suggestion very heartily, sir.

Mr. O'BRIEN. Thank you.

The CHAIRMAN. Any further questions?

(No response.)

The CHAIRMAN. Do I understand that what you are asking for here is the extension of this authorization to include what you refer to as health centers?

Dr. SURGENOR. I think if you define a health center, sir, as a complex of schools, then we are asking for the support to medicine, dentistry, pharmacy, and in our case we have a nursing school as well.

The CHAIRMAN. Well, we have another program of nursing.

Dr. SURGENOR. Yes; this is not included in the present request.

The CHAIRMAN. It is not included in this bill, no. We have a different program.

Dr. SURGENOR. Yes.

The CHAIRMAN. To provide for nursing.

Dr. SURGENOR. Yes; have I answered your question?

The CHAIRMAN. I was trying to get a little further insight into your original proposal, your No. 1 point.

Dr. SURGENOR. The health center you mean?

The CHAIRMAN. Yes.

Dr. SURGENOR. Well, I think it is a matter of definition. We define the health center as a group of schools, and we see the provisions of H.R. 3141, insofar as they apply to certain individual schools in that complex, as being very favorable to our proposed project in Buffalo.

The CHAIRMAN. Would that not more appropriately come under another proposal that is to come along later perhaps, leaving for consideration the regional medical complexes proposed by the administration, or I suppose they call it——

Dr. SURGENOR. Yes.

The CHAIRMAN. Centers for heart, stroke, and cancer.

Dr. SURGENOR. Yes.

The CHAIRMAN. Would your proposal not more nearly come within that legislation instead of in this bill, if I understand what you mean by your health center?

Dr. SURGENOR. Sir, I think the concept, the proposals of the regional medical complexes fits in very much with the plan which we have envisaged in our setting. However, the proposals, the implications, the provisions of H.R. 3141 as they apply to schools of medicine, schools of dentistry, schools of pharmacy, are of great interest to us, because we are talking first and foremost about expanding these basic educational institutions.

The CHAIRMAN. That is included under this bill.

Dr. SURGENOR. That is right, and that is what I am speaking toward.

The CHAIRMAN. I see.

Thank you very much.

Dr. SURGENOR. Thank you, Mr. Chairman.

The CHAIRMAN. Dr. F. J. Ebaugh. Dr. Ebaugh, we will be glad to have your presentation. I believe you are dean of Boston University.

STATEMENT OF DR. F. J. EBAUGH, DEAN, BOSTON UNIVERSITY, BOSTON, MASS.

Dr. EBAUGH. That is correct.

Mr. Chairman, with your permission I would like to not read a prepared statement, a copy of which I have left with your clerk, but instead make some supplementary remarks concerning this bill.

The CHAIRMAN. Do you have in mind the statement in the form of a letter introduced to me as chairman of the committee?

Dr. EBAUGH. That is correct.

The CHAIRMAN. That is what you want to go in the record.

Dr. EBAUGH. Yes.

The CHAIRMAN. Very well, you may proceed, and your letter may be included in the record.

(The letter referred to follows:)

BOSTON UNIVERSITY,
SCHOOL OF MEDICINE,
Boston, Mass., June 8, 1965.

HON. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
Washington, D.C.

DEAR REPRESENTATIVE HARRIS: In my opinion, H.R. 3141 is the most important legislation in the health field that has come before Congress this year. What, in effect, it will accomplish is to strengthen the quality and number of graduating physicians in this country. The provisions of the bill which provide matching moneys for replacement and expansion of medical school facilities is of such self-evident necessity and value to the medical schools that I do not believe it is necessary to point out the importance and the good that this has done and will do. Of particular importance are the provisions of the bill, which give a basic grant of $12,500 and $250 per student to each medical school during the first year of the bill, doubling amounts the second year. Although in my opinion the amounts should be increased, strengthening the financial structure of existing and new medical schools will have a very vast and important impact on the supply and quality of physicians for this country. Without this kind of help, I do not see how the vast majority of medcial schools are going to be able to maintain the present quality, let alone improve it. It is, of course, of critical importance, for if the quality and number of physicians is not maintained, then other health legislation, which depends on having adequate numbers of well trained physicians, will be greatly handicapped in meeting their objectives. H.R. 3141 gets at the heart of the issue.

One of the many beneficial effects this bill will have is that it will make it possible for the 20 to 30 medical schools, who, with additional help such as is outlined in the special improvement grants in this bill, would realize their full potential and achieve the excellence of facilities, faculty, and student body which now exists in the 10 to 15 top medical schools. This will be of enormous importance to the Nation.

The provisions providing for scholarships to the extent of $2,000 multiplied by one-tenth of the number first year students, with progressive increments for succeeding years, is a very important provision of this bill. In contrast to support for obtaining one's doctoral degree in the physical and other biological sciences, approximately 80 percent of the cost of medical education must be deferred in one way or another by students of medicine. This can not help but have an adverse effect both on the numbers and quality of the applicant pool to medical schools and their continuing education once accepted to medical school. Although the loan provisions of the bill have been of critical importance in allowing many medical students to complete their education who otherwise would not, inability of most medical schools to admit students on merit basis alone, without taking into consideration financial resources is of critical importance both from a standpoint of the national policy and of quality of the medical student applicant.

Sincerely,

FRANKLIN G. EBAUGH, JR., M.D., *Dean.*

Dr. EBAUGH. I am dean of Boston University Medical School, which is a privately endowed institution located in Boston, Mass. I would like to address some comments concerning the impact of the bill, H.R. 3141, on our institution, since to my knowledge it reflects the situation in a good number of medical schools in this country today.

Boston University is going through a diamond jubilee, that is 75 years without a new instructional building being built. We currently have an entrance class of 72 students, which are being educated in facilities originally planned for 50 students. We have before the council an application which comes up for consideration in June for replacing our existing facilities and expanding our school 33 percent to take a total of 96. We also have filed letters of intent for additional construction to accommodate this increased number of students which will total some $8 million over the next several years.

If it were not for this matching program, I do not see how Boston University Medical School could operate as a medical school, without these matching programs.

Now, with respect to our budget and the portions of the bill that have to do with giving a grant of support plus a per capita amount for students, at our institution, exclusive of the costs of doing research, it costs approximately three times the amount of tuition to educate a medical student. This is despite the fact that we have half of our students in a 6-year program, that is we accept students for medical school from high school, so that at the end of 6 years they receive their A.B. degree and M.D. degree instead of the usual 8 years. This means that we are able to get $4 worth of education for every $3 spent.

Despite this fact, in the fiscal year 1966 it is anticipated that we will run a deficit of $113,000. Now we are able to stay in operation by means of some grants from three foundations, gifts, and we will be able to remain solvent by this device on the basis of committed grants from private foundations for approximately 4 years.

It is anticipated in 1972 we will have a deficit of $152,000, which will have to be paid up either by support from the Government as proposed under this bill partially, plus private foundations. This is assuming that there are no inflationary effects on faculty salaries due to the establishment of several new schools contemplated.

Now if we are to remain financially solvent, we could triple our tuition. This is unthinkable. We could decrease the number of our faculty and hence the quality of our education. This is also unthinkable. Or we could decrease the number of students which would be completely against the interests of the Nation. The answer would lie, it seems to me, in the proposed grants in aid under bill 3141 to supplement the operating budget of the school, to persistent efforts to increase our endowment, and to continue to solicit gifts and foundation support for operation.

With respect to the scholarship provisions of the bill, two-thirds of our students are receiving partial support either in the form of loans, scholarships, or supporting themselves by jobs.

For these reasons this bill is of critical importance to the future existence of Boston University Medical School, and I am quite certain the same applies to a large number of schools in this country.

Thank you very much.

The CHAIRMAN. Thank you very much, Doctor.

Are there any questions?

Mr. CARTER. I have a question. I certainly want to state I like the idea of combining the school years, taking the students out of high school and letting them have their college work and their medical work as you have at Boston University. They follow that at McGill too, do they not?

Dr. EBAUGH. Yes, there is a similar program also at Northwestern University in this country.

Mr. CARTER. Are there any other schools in the United States which are so integrating their classes?

Dr. EBAUGH. I do not believe there are any other schools with a large-scale program, although I believe certain schools will take an exceptional student without a special program, but an exceptional student after 2 years of college, and admit this student to medical schools.

Mr. CARTER. How much do you figure that would save a medical student?

Dr. EBAUGH. Well, it saves the medical student in our institution approximately the equivalent of 1½ full year's tution; namely, $2,125 plus 2 years living expenses or at least $2,500.

Mr. CARTER. Thank you, sir.

The CHAIRMAN. Doctor, thank you very much. We are very glad to have your testimony.

Dr. EBAUGH. Thank you, Mr. Chairman.

The CHAIRMAN. This, I believe, concludes the list that I have of those who wish to be heard.

Mr. Carter, do you have a special guest?

Mr. CARTER. Dr. Fishel from the University of Louisville is here. I just happened to find out by chance that he was here this morning. He might want to say something. Certainly he comes from one of oldest medical schools in the United States. He is the chairman of the Department of Microbiology there. I certainly want to welcome him here.

STATEMENT OF DR. C. W. FISHEL, UNIVERSITY OF LOUISVILLE, LOUISVILLE, KY.

Dr. FISHEL. Thank you, Representative Carter.

Mr. Chairman, whatever statements I have are redundant. I believe to the statements of Dr. Howard, Dr. Berson, and Dr. Ebaugh certainly summarize the feeling of all the medical schools.

It is with a great deal of courage that a member of the basic science department participates in such a distinguished gathering, but I think it really does emphasize the point that it is the feeling of all faculty members that this bill plays a very essential role, and it is not only the feeling of the deans of the association. It goes right on down through all faculty personnel.

I think that the students in the State of Kentucky are no worse off financially than in many other States, but I do feel that the scholarship support will provide aid to a number of these which are not motivated at the present time due to financial problems.

Also, with respect to support to improve the quality of schools, since I do represent the University of Louisville, and it is one of the older

medical schools in the country, we do need and are actively engaged in attempts to improve this area.

I thank you very much.

The CHAIRMAN. Thank you, Doctor. We are glad to have you with us.

Do we have anyone else who would like to be recognized for a statement? (No response.)

The CHAIRMAN. We want to say that we are very pleased to have all of you with us today, and we appreciate the interest that has been manifest.

I have a wire from the president of the University of California, from Dr. Clark Kerr, which will be included in the record at this point.

(The telegram referred to follows:)

BERKELEY, CALIF., *June 7, 1965.*

HON. OREN HARRIS,
Member of Congress,
Longworth House Office Building,
Washington, D.C.:

The University of California ardently supports the enactment of H.R. 3141 and we urge your support of this bill. In addition to the new programs for general operational support and grants to medical, dental, and osteopathic schools for scholarships to students, this bill provides for an extension of the construction and student loan features of the Health Professions Educational Assistance Act, Public Law 129. All of the programs provided for in H.R. 3141 are essential for the continuated development and improvement of the new and existing medical schools in California and the Nation. Your support and that of your colleagues will make it possible to assure a continuation of high-quality teaching programs in the health sciences.

CLARK KERR,
President, University of California.

The CHAIRMAN. Our colleague from Washington, Mrs. Hansen, has submitted the statement of Dr. Pierce which will be included in the record.

(Dr. Pierce's statement is as follows:)

WASHINGTON OPTOMETRIC ASSOCIATION,
Seattle, Wash., June 4, 1965.

Representative JULIA BUTLER HANSEN,
Washington, D.C.:

Subject: Health Professions Educational Assistance Amendments of 1965.
Introduced by: Representative John E. Fogarty, Democrat, of Rhode Island—H.R. 7385.
Summary of bill: This bill provides operational grants and student scholarships for schools of medicine, dentistry, and osteopathy, and extends expiring provisions of the Health Professions Educational Assistance Act for student loans and for aid in construction of teaching facilities for the training of physicians, dentists, optometrists, pharmacists, podiatrists, or professional public health personnel.

The original bill which was submitted by Representative Oren Harris, Democrat, of Arkansas, H.R. 3141, did provide for the inclusion of schools of medicine, dentistry, and osteopathy, but not for schools and colleges of optometry.

Under bill H.R. 3141, for the fiscal year ending June 30, 1966, basic improvement grants, "to improve the quality of their educational programs," are allowed the schools of medicine, dentistry, and osteopathy, but not to optometry.

Application for grants will not be approved by the U.S. Surgeon General except after consultation of the newly created National Advisory Council on Medical and Dental Education. Again, optometry is ignored in the composition of this Council.

The Surgeon General will make grants as specified in the bill to accredited schools of medicine, osteopathy, or dentistry for scholarship purposes but not to students of optometry. Also, the regulation for these grants are prescribed and

consultation with the National Advisory Council—from which optometrists are excluded.

Optometry seeks nothing more than equity. Good vision for the rapidly expanding population is vital to the Nation's welfare and security. With the increased birth rate and a longer lifespan, few Americans go through life without at some time requiring professional visual care.

Today approximately 75 percent of Americans seeking visual care visit optometrists. The optometrist counterpart in the medical profession, the opthalmologist is for the most part located in the larger metropolitan areas, whereas, otometrists are also found in smaller communities and rural areas.

Currently all schools of optometry require a minimum of 5 years of study at the college level but some now require a sixth year to obtain the doctor of optometry degree. With increasing costs of tuition, books, equipment, and living expenses, many students cannot even hope to begin study in the field of optometry.

The ratio of optometrists to the population of the United States is now about 1 to 11,000 people. The American Optometric Association estimates that the U.S. vision-care requirements should be 1 optometrist for every 7,000 Americans. To achieve this ratio, each college of optometry would have to more than double its number of graduates. One must keep in mind that the Armed Forces are in need of optometrists, and about 400 are now serving in the Army, Navy, and Air Force.

The existing 10 schools of optometry in 9 States must fill the needs for 50 States. A few States have realized the need for more optometrists and have authorized loans for home-State students to study optometry.

Research has proven that proper vision care for business and industrial employees can pay for itself many times over in efficiency and reduced accidents.

Public officials and various safety organizations look to optometrists to establish and maintain proper vision standards.

In the State of Washington, the Washington Optometric Association, the State affiliate of the American Optometric Association, has sponsored a traffic safety colloquium for the past 2 years. Speakers of national prominence in traffic safety were brought in to speak to men from the highway patrol, local and county police, and sheriffs departments. Mayors, councilmen, commissioners, judges, and educators were also in attendance.

Psychologists and educators recognize more and more the importance in vision in child development. Undetected vision problems have often created handicaps that are a major contributing factor to juvenile delinquency and school dropouts.

Virtually every type of activity that Americans engage themselves in requires good vision. Their lives can be made more enjoyable, more productive, and often safer by improved vision.

None of these things are possible unless the American people have the opportunity to avail themselves of the services of an optometrist. With the number of optometrists retiring and passing on, surpassing the number of new students graduating from optometry schools, immediate help is needed. One hurdle would be overcome with the adoption of Representative Fogarty's bill, H.R. 7285.

Dr. A. L. PIERCE,
Longview, Wash.

The CHAIRMAN. This will conclude the hearings. The record will be kept open for 5 days. Anyone who desires to include statements appropriate to this subject may do so within that time. The record then will be closed, and we will proceed to the printing of it in order that consideration may be given to this program by the committee at an early date.

This concludes the program and the committee is adjourned.

(The following material was submitted for the record:)

THE UNIVERSITY OF ROCHESTER,
SCHOOL OF MEDICINE & DENTISTRY
AND STRONG MEMORIAL HOSPITAL,
Rochester, N.Y., June 7, 1965.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

MY DEAR MR. HARRIS: The increasing public concern with health as a right of every citizen and the great advances in medical knowledge which have made

increasingly good health care possible for so many, have greatly expanded the demands upon all those engaged in the provision of health services, and in education and research in the health professions.

Fundamental to all health programs are the people who are educated to provide care, to prevent disease, and to provide new knowledge which will lead to the improvement of the health of every person in this country. The most critical problem which faces us is that of education in the health professions.

At the center of this education is the medical school which, with its hospitals, serves to prepare persons for all the health professions and to conduct research, as well as to offer the most advanced and best techniques in diagnosis and treatment of patients. The needs of the medical schools in this country are of the utmost urgency. Public funds of considerable magnitude are necessary for the modernization of existing physical facilities, and for the construction of new facilities for teaching, research, and patient care in all medical schools. Only with such support can they continue to develop the people who will assure the finest of health services for this country.

The Congress of the United States has made generous appropriations in the past and continues to support research in the health sciences. It has also seen fit to provide funds in a more limited manner for the construction of health educational facilities. It is of the utmost importance that the support of health education be greatly expanded, including funds for renovation and construction of laboratories, classrooms, and university hospitals, and funds for the basic operating support of medical schools. I earnestly hope that the Health Professions Educational Assistance Amendments of 1965 (H.R. 3141) will be favorably reported out of your committee and that every effort will be made for its enactment with the fullest financial provisions possible.

Very truly yours,

LEONARD D. FENNINGER, M.D., *Medical Director.*

HALLMARK CARDS, INC.,
Kansas City, Mo., June 8, 1965.

Hon. OREN HARRIS,
House of Representatives,
Washington, D.C.

DEAR MR. HARRIS: Knowing of your important position as chairman of the House Committee on Interstate and Foreign Commerce, I am writing to you about the Health Professions Educational Assistance Amendments of 1965 (H.R. 3141) (S. 595).

Because of my vital concern as a member of the American Hospital Association Committee on Hospital Planning, my position as a member of the National Committee on Community Health Services Task Force, and primarily as president of a large university-affiliated medical center, I have a special interest in this particular legislation.

There has obviously been a growing concern in this country about matters relative to health care. This has been adequately manifested through action of our Congress. As a lay person with a real concern for the distribution of health care, I have viewed the medical care legislation with alarm because of the critical shortage of personnel that exists in medicine now and will be amplified manifold in the future. It is quite evident that the current Federal legislation, present and future, in the medical care area will result in a marked increase in this shortage due to increased demands for service and care on the part of all citizens.

We are experiencing a shortage of physicians in this Nation and have done very little to provide for increased enrollment of students in our medical schools. Even without the additional Federal programs, it is quite obvious to us that population increases have created a further lag in the supply of physicians.

It seems to me that one way to close this tremendous gap may be found in H.R. 3141. I sincerely believe the passage of this bill in its present or amplified form will be of great importance for the health and welfare of our Nation in the years to come. If you think I could be of help by a personal appearance before the committee, I should be pleased to make myself available.

Sincerely,

NATHAN J. STARK.

KANSAS CITY ASSOCIATION OF TRUSTS & FOUNDATIONS,
Kansas City, Mo., June 4, 1965.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: This letter is written in support of H.R. 3141 and its counterpart, Senate bill 595—Health Professions Educational Assistance Amendments Act. It is my understanding that this bill is before your committee for consideration at this time.

We have been much involved in medical affairs over a long period of years and are currently lending assistance to the development of a large medical and dental complex here operated on an affiliate arrangement with the School of Medicine of the University of Missouri at Columbia. The General Hospital of Kansas City, Mo., which is our base of operations, provides medical assistance to all indigent persons in this area.

The legislation before you seems to us to be of the utmost importance. We are hopeful that the present act will be continued, and that its provisions will be enlarged to provide scholarship assistance for those wishing to enter the study of medicine.

The nub of the problem ahead in our view is twofold: (1) the transmission of knowledge based on the flood of research sponsored in recent years to those who care for the sick and disabled; and (2) the development of appropriate inducements to young men and women capable of medical study and interested in pursuing medicine as a career. In connection with the first, it is somewhat tragic that the present levels of medical practice are considerably below present levels of knowledge. That systematic effort is necessary to redress the situation seems to us plain, indeed.

The support made available in recent years, notably by Government, to enable young men and women to pursue graduate studies in the physical sciences, but without comparable arrangements available to those who wish to study medicine, has created something of an imbalance in this area. I think it is imperative that proper incentives be available, and especially in view of the high cost of medical training—a cost factor which tends to eliminate all but those who come from families able to sustain the expense of medical education. If much of the current legislation enlarging Federal support for medical care in various ways should become law, the present shortages of medical personnel at all levels will be greatly accentuated and in my judgment will constitute a crisis of major proportions. Any steps taken to relieve this pressure at this time can only be charged as a credit to foresight.

I would be happy to appear before your committee if I could be helpful in any way respecting this legislation.

Sincerely yours,

HOMER C. WADSWORTH.

AMERICAN PHARMACEUTICAL ASSOCIATION,
Washington, D.C., June 2, 1965.

Re H.R. 3141 (88th Cong., 1st sess.).

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
U.S. House of Representatives,
Washington, D.C.

MY DEAR MR. HARRIS: As the national professional society of pharmacists, the American Pharmaceutical Association supports the Health Profession Educational Assistance Amendments of 1965.

The American Assoication of Colleges of Pharmacy has advised us that they will testify during the public hearings on H.R. 3141 scheduled for next week. Since we believe the AACP representative can furnish your commitee with such information as it may desire about the needs for facilities and scholarship support for pharmaceutical education, we are not requesting an opportunity to appear before the committee.

The health profession of pharmacy plays an important role in comprehensive medical care. The citizens of every community depend upon complete health care service, and it is essential to the public health and welfare that an adequate supply of pharmacy manpower be continuously available to serve the public.

Quite naturally, pharmacy competes with medicine, dentistry, and other health

professions for students. The normal matriculation period for pharmacists is now five years plus an internship and even 6 years in some instances. The present exacting nature of the pharmaceutical sciences, which grows more complex daily, requires that the profession continue to attract young people of the highest academic caliber.

We believe that the availability of scholarship assistance is an important factor facing a student making a choice of a career, particularly when he is choosing between one or another of the health professions. Thus, we hope that colleges of pharmacy can be added to the proposed part F of your bill.

Scholarship support and adequate classroom facilities will help our pharmacy colleges attract and educate students capable of meeting the rigorous requirements established by the profession to serve the public properly and faithfully.

Very truly yours,

WILLIAM S. APPLE, Ph. D.,
Executive Director.

PENNSYLVANIA COLLEGE OF PODIATRY,
Philadelphia, Pa., June 8, 1965.

HON. OREN HARRIS,
Chairman, Health and Safety Subcommittee of the Interstate and Foreign Commerce Committee, U.S. Senate, Washington, D.C.

DEAR SIR: The Pennsylvania College of Podiatry is a new school, established in 1963 and accepting students since that time. In the short time of our existence, we have found that operating a college, as both an educational institution and as a community service organization, is totally impossible based on the income provided by students alone.

In our profession, as well as in many other small professions, we find it a real hardship to provide the additional funds from the contributions within our profession and from friends.

It seems to me that a great many of our new colleges will founder and cease to exist as educational institutions if funds from some other source are not forthcoming.

While we can depend, to some extent, on appropriations from our various States, generally speaking, these are too meager to be of any lasting assistance.

I am writing to you because of your record as a progressive thinker, and I appeal to you as chairman of the Health and Safety Subcommittee of the Interstate and Foreign Commerce Committee, adding the petition of the Pennsylvania College of Podiatry to those of other schools wishing to advance the educational standards of the United States.

Sincerely,

ROBERT J. WAGNON, *Dean.*

STATEMENT OF THE AMERICAN MEDICAL ASSOCIATION

Mr. Chairman and members of the subcommittee, the American Medical Association is grateful for an opportunity to present its views to the subcommittee on a measure which the association deems to be of great significance to the health resources of our Nation.

Providing for the health needs of our citizens has been, and continues to be, a concern of the American Medical Association. As the national association representing in excess of 200,000 physicians of this country, we share with this subcommittee and the Congress the goal of increasing the number of physicians necessary to meet the needs of our growing population. In addition, we recognize the need for facilities to accomplish this goal.

The quality of medical care available to our citizens today is a matter to which this country can point with pride, for we can state without equivocation that its excellence is not surpassed elsewhere. A principal factor in this achievement has been the excellence of medical education.

Since its inception in 1847, the American Medical Association has been seriously concerned with the quality of medical education in the United States and has worked constantly to improve the standard of medical education. In collaboration with the Association of American Medical Colleges, the AMA has been responsible for the survey and accreditation of existing medical schools and has provided consultation and advice for institutions developing new medical schools in order that they might eventually meet standards for accredi-

tation. In addition, the American Medical Association has appeared before congressional committees on a number of occasions in support of measures which would provide assistance in the construction and rehabilitation of medical schools.

EXTENSION OF CONSTRUCTION PROGRAM

As we understand the pending bill, it would extend the expiring provisions of the Health Professions Educational Assistance Act of 1963, Public Law 88–129, which provides in part for matching grants for construction, replacement or rehababliitation of medical schools. The bill would, in addition, extend the program of Federal loans to medical students and provide new programs authorizing Federal funds for grants to medical schools for education improvements and for scholarships.

In February of 1963, at the time H.R. 12, 88th Congress (Public Law 88–129), was being considered by the House Interstate and Foreign Commerce Committee, the AMA testified in support of the construction provisions, pointing to the priority of need at that time for an increase and improvement in the physical facilities available for medical education. We indicated our belief that there was need for assistance in the expansion, construction, and remodeling of the physical facilities of medical schools and that, therefore, a one-time expenditure of Federal funds on a matching basis was justified.

It was then apparent that new medical schools would be needed and that many existing schools would have to increase the size of their classes in order to produce the physicians required to provide medical care for our growing population. Accordingly, the American Medical Association and the Association of American Medical Colleges worked actively to encourage qualified educational institutions to initiate the development of new medical schools. The need for financial assistance in the construction of new medical schools and for the replacement and rehabilitation of obsolescent facilities led to the enactment of Public Law 88–129.

Partially as a result of that law, 12 institutions have made public announcement of comitment to the establishment of new medical schools and at least as many more institutions are seriously considering the establishment of new schools. In addition, many medical schools have made application for funds to assist in the replacemtu or rehabilitation of outmoded facilities, with the anticipation of expanding significantly the size of their present medical classes. It may, therefore, be concluded that the construction provisions of Public Law 88–129 have been successful in implementing the program to increase the number of medical graduates.

It is our understanding, however, that the total amount requested in construction applications currently on hand exceeds the funds available under Public Law 88–129, and that many more applications can be expected within the next few years, for which no funds can be provided unless additional appropriations are forthcoming. The American Medical Association believes that new and expanded medical schools will be vitally needed in the years ahead to provide for our growing population and that the provision of Federal matching funds for construction is important to the development of such facilities. The AMA, therefore, supports section 3 of H.R. 3141 which calls for extension of the construction program for medical schools.

IMPROVEMENTS GRANTS

Section 2 provides for a new program of grants to schools of medicine, dentistry and osteopathy. Designated as "basic improvement" or "special improvement" grants, they are apparently designed, in an unrestricted manner, to assist the schools in the operation and maintenance of their educational programs. The American Medical Association has consistently opposed Federal operational support of medical schools because it is our conviction that it is likely to lead to Federal domination of medical education. We urge the subcommittee to delete this provision from the bill.

STUDENT LOANS AND SCHOLARSHIPS

H.R. 3141 also provides a new program for grants to medical schools for scholarships and extends the student loan program implemented pursuant to the enactment of Public Law 88–129.

With respect to scholarships, there does not appear to be any justification for the use of public funds to finance the education of students who will enter a profession in which they will earn above average incomes. Through a system of loans (repayable after entering the profession), such students are now enabled to complete their education.

Various arguments have been advanced to support the contention that scholarships are required for medical students, but we do not believe they can be sustained after close scrutiny. First, it is claimed that scholarships are necessary to attract a sufficient supply of superior applicants to medical schools. The fact is that the number of qualified applicants is more than adequate to fill the positions in medical school classes, and future projections indicate that the ratio of applicants to positions in the entering classes is likely to increase, even with the anticipated development of new medical schools and expansion of existing schools. From a low point of 1.7 to 1 in the late 1950's, the applicant-to-accepted-student ratio has now risen to about 2.0 to 1 and is expected to reach 3 to 1 by 1975.

Furthermore, the quality of applicants appears to be improving—based on college records and medical college admission test scores. The proportion of "superior" medical school applicants compares favorably with that in other graduate fields, according to a recent study by the National Opinion Research Center. Surveys carried out among superior students at the high school level show also that the popularity of medicine as a career has been increasing among such students. This would indicate to us that unless other factors intervene, the quality of medical school applicants will be maintained in future years.

A second argument is that medicine is a career open only to the children of wealthy families and that Federal scholarships for needy students would permit large numbers of underprivileged students to enter the profession. This claim is based upon figures showing that only 15 percent of medical students are from families with incomes below $5,000 compared to 39 percent of the families in the general population who have incomes at this level, and that 49 percent of medical student families have incomes above $10,000 compared with 18 percent of families in the general population. It must be remembered, however, that medical schools may accept only students who have first completed 2 to 4 years of college, and when the family incomes of such college students or graduates are considered, they are found to be much closer to incomes of families of medical students than are those of the general population. Similarly, comparison of the incomes of the families of graduate students in the arts and sciences with those of the families of National Merit Scholarship finalists shows that they are practically identical with the incomes of families of medical students.

We note that the scholarship program under the bill would favor students from low-income families on the basis of need for financial assistance. However, it has never been demonstrated that there are significant numbers of needy students who are denied careers in medicine for lack of financial support. That the availability of Federal scholarships would not be likely to make a significant difference in the proportion of needy students studying medicine may be seen by the fact that, although Federal fellowships and scholarships have been available to graduate studeuts in the arts and sciences for many years, the family incomes of students in these fields are approximately the same as those of families of medical students.

During the fiscal year 1964, a total of $3,900,905 in nonrefundable grants was awarded to medical students, as reported by the 87 medical schools. The amount of nourefundable grants has increased steadily in recent years through increasing support from private and local government sources. Although the costs of medical education to the student have aiso increased during this period, the growth of nonrefundable grants has been at a faster rate.

We believe that the scholarship provisions in H.R. 3141 should be deleted as they were in 1963 from H.R. 12. The adequacy of loans available to medical students and the increasing amounts of nonrefundable grants available to them make unnecessary the proposed scholarship program. We therefore urge that the scholarship provisions of H.R. 3141 not be adopted.

With respect to the student loan provisions of the pending bill, in our testimony on H.R. 12 before the enactment of Public Law 88–129, we stated that a loan program was unnecessary since the financial needs of students were being adequately met by the non-Government, nonsubsidized guaranteed loan program of the AMA Education and Research Foundation. Two additional

years of experience with the AMA–ERF loan program have strengthened the conviction that this program, together with existing private loan programs of medical schools, is capable of meeting the needs of medical students for financial assistance. We would like to briefly describe the AMA loan program at this time.

Designed to alleviate the financial difficulties of medical students and to encourage career decisions in favor of medicine, the American Medical Association Education and Research Foundation loan program utilizes the principle of a security fund functioning as a surety agency, to make available unsecured personal loans at a relatively low rate of interest to medical students, interns, and residents. Administration costs are paid by the foundation.

The growth and success of the AMA–ERF loan program have been outstanding. Initiated in March of 1962, it is now estimated that one in every six medical trainees in the country is an AMA–ERF borrower. In a little more than 3 years' time, the program has provided over 22,000 loans totaling more than $25 million in principal amount—or an average of nearly 600 loans per month. Of this total, 13,000 loans, or nearly 60 percent have gone to medical students, the others to interns and residents. At no time during the history of this program has any qualified loan applicant been refused a loan because funds were lacking. The less than 6 percent rejections were applications which sought funds primarily for nonessential living expenses.

Under the AMA–ERF program, medical students who have completed the first term of their freshman year may apply for loans of up to $1,500 per year and for a total of up to $10,000 over their entire medical training period. The loans are made to students through normal banking channels and are countersigned by AMA's Education and Research Foundation which agrees to buy any defaulted note at face value plus accrued interest. To demonstrate its ability to perform under the contractual agreement, the foundation deposits funds equal to 8 percent of the credit extended to borrowers. In effect, this makes available $12.50 for every dollar contained in the guarantee fund.

The AMA–ERF fund has been developed through contributions from various sources, including physicians, medical organizations, and private industry. An important incentive to contributors is the enterprising and self-reliant attitude developed in our young citizens who demonstrate their desire to be responsible for financing their own education.

In view of the availability of private loans to medical students, including the AMA–ERF program, we submit that a need to continue the federally subsidized loan program has not been demonstrated. We urge that the loan provisions under the Health Professions Educational Assistance Act of 1963 not be extended.

NATIONAL ADVISORY COUNCIL ON MEDICAL AND DENTAL EDUCATION

The bill also provides for the establishment of a National Advisory Council on Medical and Dental Education to advise the Surgeon General in the preparation of general regulations and with respect to policy matters in the administration of the proposed educational improvement and scholarship grants to schools of medicine, dentistry and osteopathy. The American Medical Association does not believe that the new programs of educational improvement grants and scholarship grants should be adopted, in which case, of course, there would be no need for this advisory council. Another National Advisory Council is already in existence, pursuant to Public Law 88–129, which should continue to function. In the event the provision for the new National Advisory Council is adopted, we believe that its members should include representatives of the practicing physicians of this country, selected from a panel of names submitted by the American Medical Association.

We appreciate this opportunity of presenting the views of medicine to this subcommittee in its consideration of H.R. 3141, 89th Congress.

STATEMENT OF JOHN D. SCARLETT, DEAN, SCHOOL OF LAW, UNIVERSITY OF SOUTH DAKOTA

The passage of H.R. 3141, the Health Professions Educational Assistance Act, will sharply intensify a basic policy problem which should be squarely faced and carefully considered before final action is taken on this bill. During the past 10 years Congress has developed a higher educational policy designed to channel as many bright young men and women as possible into the general areas of

science and engineering, and to provide more and better training in these fields. More and more funds have been provided to build and staff educational facilities, to finance research projects, and to provide scholarship and loan assistance to prospective scientists and engineers. An intensive public education program continues to focus the attention of parents and students and high school guidance counselors upon the ease of attainment, the material benefits, and the patriotic desirability of a scientific career.

These programs have been eminently successfuiy. Last week at South Dakota's Boys' State I watched as some 500 of the brightest young men in the State were asked what career they hoped to follow. Over 100 indicated engineering, and almost as many picked science. About 50 planned to become doctors, 20 hoped to be teachers, and less than a dozen chose the law. These results are hardly surprising, but they do serve to point up the problem. The overwhelming emphasis placed upon scientific education by the Federal higher educational program is resulting in a snowballing shift of high-grade intellectual talent into science-related activities. This, of course, is precisely what the program was designed to accomplish. What may not have been written into the design is the stopping point. At what point will a further shift of talent in this direction begin to hinder our national development rather than promote it, and have we now reached that point?

The Health Professions Educational Assistance Act pushed the scientific educational program into the area of the professional graduate school, and H.R. 3141 will substantially widen its impact. In combination with the science-oriented Federal program it will undoubtedly attract more top-caliber young men and women into the medical profession and will provide them with the best possible training. Many of these outstanding young people will be diverted from my own area of immediate concern, the law. In South Dakota, a State somewhat typical of the smaller States with limited resources, a young man choosing a career is faced with the following picture: There is one medical school in the State. Its plant, subsidized by Federal funds, is relatively modern and well equipped. Its faculty is the highest paid in the university, and receives substantial additional support from Federal and private research grants. Its reputation in the area is good, and poor students ordinarily do not bother to apply. Financial assistance is available in college and medical school through Government grants. The Government has indicated, through its massive support programs, that the greatest need, and therefore the greatest opportunity, lies in science and medicine. H.R. 3141 would print this picture in technicolor.

On the other hand, there is also one law school in the State. Its plant is 50 years old, and looks it. Its staff is paid little more than undergraduate professors, and receives little or no support from any outside source. The reputatiou of the schooi is mediocre at best, and poor students frequently apply. No financial assistance from governmental sources is available except in the event of an undergraduate college surplus of National Defense Education Act loan funds. The Government has indicated its disinterest by failing to include legal education in any of its major higher education programs. H.R. 3141 will make this picture even less exciting.

Under these circumstances the choice of uncommitted youth is clear. In a State like South Dakota, with limited human and economic resources, the certain result will be more and better doctors and dentists and osteopaths. This, I assume, is what H.R. 3141 is designed to accomplish. Equally certain, however, will be a relative depression of the quality of the State bar, and I cannot believe that this is the intent of Congress. I cannot believe that it is so much more important to have top-quality men with the best possible training in the doctors' offices, the dentists' offices, and the osteopaths' offices of the State than it is to have equally good men with equally good training in the States attorneys' offices, on the judges' benches, and on the bench of the State supreme court. The development and operation of one of the three branches of our Government is placed by the Constitution in the hands of the bar, and lawyers fill many important and influential posts in the legislative and executive branches. A recent survey by the American Bar Association disclosed that more than 50 percent of both the U.S. Senate and the House of Representatives are lawyers. If our governmental system is to endure and continue to develop, it seems imperative that legal education be maintained on a reasonably competitive basis with medical and scientific education. Passage of H.R. 3141 in its present form would load the dice against legal education, and, at least in the smaller States, relegate it to a distinctly second-rate position. In recent years the judiciary and the

bar have been subjected to a great deal of strong criticism—some of it, at least, apparently justified. Unless the law is enabled to compete on relatively equal terms for the most talented youth the Nation has to offer, this situation can only get worse.

I therefore urge the committee to consider the amendment of H.R. 3141 to include assistance to law schools, in order to provide equal opportunity for top quality training in each of the professions, and to develop a more able and highly qualified bench and bar to assist in the operation and protection and development of our democratic form of government.

UNIVERSITY OF MICHIGAN,
Ann Arbor, Mich., June 3, 1965.

HON. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
Washington, D.C.

DEAR MR. HARRIS: Senate bill, S. 595, and House bill, H.R. 3141, were discussed in detail at a recent meeting of the Executive Faculty of the University of Michigan Medical School. As a member of the executive faculty, I should like to express my conviction of the tremendous importance of these bills.

Although the approximately 85 medical and 45 dental schools in our country differ widely in their histories, facilities, and problems, nevertheless, together they represent a national asset of inestimable value. Governmental assistance of the order contemplated will most assuredly enhance the value of this asset, and should definitely advance the cause of medical, dental, and osteopathic education.

I hope your committee will give serious attention to the promotion of effective legislation in this very important field.

Yours sincerely,

W. T. DEMPSTER,
Professor of Anatomy.

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL,
Ann Arbor, June 3, 1965.

HON. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
Washington, D.C.

DEAR MR. HARRIS: As a long-time teacher in this medical school and presently chairman of its department of anatomy, I have dealt through the years with many of the problems of medical education. This is a most demanding education, both professionally and financially, and it is my mature judgment that Federal aid can be of very great benefit in easing the student costs and in aiding on the problems of capital expenditure. I would regard S. 595 and H.R. 3141 as bills promising real social benefit in the Nation and urge sympathetic consideration of them.

Sincerely yours,

RUSSELL T. WOODBURNE, *Chairman.*

THE AMERICAN PUBLIC HEALTH ASSOCIATION, INC.,
New York, N.Y., June 4, 1965.

HON. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
Rayburn House Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: Hearings by your committee on continuation of the Health Professions Educational Assistance Act has been anticipated since the original enactment 2 years ago. At that time, as was stated in the report of your committee, the 3-year authorization could not be considered sufficient to remedy the serious problem of the shortage of medical manpower which faced this Nation. The periodic congressional review which was implied in the enactment is both inevitable and applauded. We believe it fully consonant with the responsibilities of the Congress that periodic reviews be made of all congressionally authorized programs. We believe that the experience during the period this program has been in operation fully validates the support which the American Public Health Association gives to the continuation of the present program plus certain additions which I shall enumerate.

Thero was no question, either in the minds of your committee, the Congress, nor certainly in the minds of members of the APHA, that a 3-year program could not to any perceptible degree soive the probiem of the medicai manpower shortage which our Nation is experiencing. At the very ieast, there was a realization, I feel sure, that no iess than 6 years would have to transpire before there would be any impact upon this shortage as a resuit of the enactment of the Health Professions Educational Assistance Act. Most assuredly, this program must be continued. H.R. 3141, which you have introduced, would continue this program as well as expand it in certain areas and upon this I would iike to voice the opinions of the APHA. For sake of continuity I shall refer to the sections of the biii in sequence.

The proposai to provide grants to improve the quaiity of the schools of medicine, dentistry, and osteopathy are, we beiieve, compietely in accord with the objectives of the legisiation. Certainly not to provide to schools the abiiity, through additional funds, to improve the quality of the instruction which they give is a questionabie practice. Our Nation has prided itseif upon the excellence of its medical training and manpower. This excellence must be maintained and improved. We believe that the provision contained in your biii to provide to the schools additional resources to increase the capability of those schools to provide a product of increasingly bettered excelience is compietely consonant with the originai precepts of the act which was approved by the Congress in 1963.

We are in agreement with your proposai that there be created a National Advisory Council on Medicai and Dental Education. Certainly the counsei and advice of the kinds of persons envisioned in the ianguage of your biii would be of considerable value to the Surgeon General in the administration of this act. We do, therefore, support this provision of H.R. 3141.

In reiation to the scholarship grants to schools of medicine, osteopathy, or dentistry, we wish to make this point. In 1963, when we testified on the scholarship grant proposed, we pointed out that the art and science of the heaiing professions was in increasing competition for recruits from a number of other worthy and worthwhile professions. We suggested, in fact we recommended, that there be an incentive via scholarship to worthy persons to enter these fields of endeavor. We are somewhat discouraged by the languagc proposed in H.R. 3141 as it relates to the scholarship grants in that it appears to us that this would simply provide to existing schools of medicine, osteopathy, or dentistry another source of funds to use as they might best decide. If a scholarship program could be based upon a nationwide merit competition, if the concept of scholarships could be based upon excelience of performance, we would feel much more comfortable in supporting this provision. Uniess and until such considerations can be given, we are ioathe to support the scholarship grant provision as incorporated in the biii at present.

In respect to the extension of the present authority relative to the construction program for medical, dental, and other health professions schools, to extension and improvement in the program for student ioans, we are in compiete accord with the provisions of the biii which you have introduced; and we wish to add our support for them. This endeavor, which you, Mr. Chairman, made expiicitiy ciear in the report of your committee in 1963 as a iongterm and protracted objective is most assuredly worthy of the support and approvai of ail who are interested in the heaith of our Nation. We certainly wish to add the voice of the over 15,000 members of the American Pubiic Heaith Association to your endeavors in this respect and hope that the features of this biii for which I have outlined our support will be enacted. We would hope that the scholarship issue might be made more compatibie with the fundamental precepts which are accepted as necessary to a scholarship program.

Please feel free to call upon us for any additional information which we may be able to give.

Sincereiy yours,

BERWYN F. MATTISON, M.D., *Executive Director.*

UNIVERSITY OF SOUTHERN CALIFORNIA,
SCHOOL OF PHARMACY,
Los Angeles, Calif., June 14, 1965.

OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. HARRIS: In addition to the information supplied your committee by Charles W. Bliven in behalf of pharmaceutical education, I would like you to know that our school is one of the two requiring a 6-year program covering the basic and applied sciences for graduation to qualify for licensing, and is the only school in southern California.

We, under crowded conditions and by the use of facilities that have been in use over the past 40 years, accept 100 students each year, for a school total of approximately 400 undergraduates. We are very thankful that you have included us as a member of the health team eligible for construction funds for our undergraduate program. With this assistauce we hope to build a new undergraduate school. It has been my observation out of my close association with pharmacists that they daily answer many questions iu a beneficial manner for the health and welfare of their customers. It is our concern that our graduates be well qualified in their field of practice and that they be ready with auswers about the drugs when such requests, as is often the case, come from the medical practitioner.

We out of demand are increasing our graduate offering and plan to limit our graduate program to 50 applicants seeking the Ph. D. degree. At present we can accommodate but half that number or the 24 now registered.

Our students come from families of like means as students of medicine, dentistry, and osteopathy. The pharmacist serves the needs of the public over a longer period of time each week and would be sorely missed if he were not readily available in each community. He is now expanding his service to cover the growing hospital facilities.

I am confident public health will be better served if you include pharmacy as a necessary discipline needing support in its overall educational program to the end that we have better and adequate personnel in our urban and community pharmacies.

Sincerely,

ALVAH G. HALL, *Dean.*

AMERICAN HOSPITAL ASSOCIATION,
Washington, D.C., June 14, 1965.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
U.S. House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: This statement expresses the views of the American Hospital Association on H.R. 3141, "The Health Professions Educational Assistance Amendments of 1965." We believe the major provisions incorporated in this bill are greatly needed, and we fully support the legislation.

Through the years the American Hospital Association has urged the Congress to enact legislation which will aid in increasing the number of physicians, dentists, and other health personnel. We have pointed out the serious and growing deficiencies in the Nation's health program which result from inadequate numbers of these professional personnel. Last year the acute short-term general hospitals of the country provided care to 26,647,435 inpatients, and in addition outpatients were given care during 94,503,000 visits. Hospitals, therefore, are well aware of the problems involved in providing essential health services to our growing population and of the decreasing ability of the Nation to provide such services unless we are assured of adequate numbers of well-trained physicians and dentists. Hospitals, of course, play a vital role in medical education both at the undergraduate level and for the internship and residency programs. We believe, therefore, that our support of this legislation reflects the needs of the public as expressed by the hospitals of the Nation, which as centers of health activities are dedicated to serve these needs.

BASIC AND SPECIAL IMPROVEMENT GRANTS

We have in previous hearings expressed our belief that the present means for financing medical and dental schools are not satisfactory. We know that medical schools incur increasing deficits. The contribution of these schools to the Nation is such as to warrant the support of the Federal Government in underwriting at least a portion of the costs of operating such schools. A great many of the products of these schools serve on a career basis with the health branches of the armed services and other Federal departments and practically all of them serve for temporary periods in the armed services. Adequate numbers of physicians and dentists are needed to maintain the health of the Armed Forces and therefore are essential to the security of the Nation.

The amounts of money which this legislation proposes are nominal. The improvement grants to these educational institutions are needed and fully supported by this association.

SCHOLARSHIP GRANTS

The American Hospital Association fully supports programs providing Federal scholarships to students in medicine and dentistry. In order to obtain the substantially increased numbers of physicians and dentists needed, it will be necessary to encourage every eligible student to enter these fields regardless of their financial circumstances. Far too large a proportion of such students at present come from higher economic levels in the population. Though student loan programs are highly desirable and are effective in providing needed assistance to a good many students, such programs are not likely to be effective in encouraging fully qualified students in the very low economic levels to pursue their studies in these fields of endeavor. We believe that, under carefully controlled circumstances, Federal scholarships are needed. We note that the scholarship grants are made to the schools themselves and that the scholarships are awarded to the students by the schools. We believe such a procedure to be highly desirable.

We fully support this section of the legislation.

EXTENSION OF CONSTRUCTION PROGRAMS

The American Hospital Association supported this provision of the bill when it was originally enacted. We know that only a start has been made in meeting the needs of the Nation for adequate numbers of such professional schools, and we urge the continuation and expansion of this program.

STUDENT LOANS

We thoroughly approve of the continuation of the student loan program, and we believe the increase from $2,000 to $2,500 is most desirable and more in keeping with the costs facing students in these professional schools.

We appreciate this opportunity of expressing the views of the American Hospital Association on this important legislation, and we request that this statement be incorporated in the record of the hearings.

Sincerely,

KENNETH WILLIAMSON, *Associate Director.*

PHARMACEUTICAL MANUFACTURERS ASSOCIATION,
Washington, D.C., June 14, 1965.

Re H.R. 3141, 89th Congress.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This letter is submitted on behalf of the Pharmaceutical Manufacturers Association in support of H.R. 3141, a bill amending title VII of the Public Health Service Act and entitled the "Health Professions Educational Assistance Amendments of 1965." This legislation, if enacted, would extend, for an additional 5 years, an existing program for the construction of teaching facilities for students in schools of medicine, pharmacy, and in other health professions. It would also, among other things, extend the student loan provision of the Public Health Service Act for students of medicine, dentistry,

and osteopathy; and provide scholarship grants for needy students in such schools.

The Pharmaceutical Manufacturers Association is a trade association of 140 manufacturers of prescription drugs and related products, who produce more than 90 percent of the Nation's total prescription drug output. We respectfully invite attention to the historical fact that there has been no important development in recent decades in drug therapy in which member firms of PMA have not played a significant role, either in the discovery of the agent or in defining its utility and making it readily available in useful and dependable form to the medical profession.

We observe with appreciation the recognition which Congress has accorded to pharmacy by including in the construction portion of this program the schools of pharmacy located throughout the United States. Since these schools serve the Nation's health interests, this recognition is truly merited. Their graduates must be trained to meet demands in many fields concerned with public health, as for example service in Federal and State governments, in the Armed Forces, in research, in community pharmacies, and in industry.

We believe, however, that the student loan and the scholarship grant portions of the bill should be expanded to include students in pharmacy. There is available ample documentation to show that many of these students need financial aid to enable them to continue their education and thus provide the nation with an essential number of well-trained and well-qualified persons in the many fields in which pharmacy plays such a vital role. The increased availability of financial aid will encourage greater numbers of high-ranking students, to follow careers in pharmacy.

It would be deeply appreciated if you would make this letter a part of the record of your committee's hearings on H.R. 3141.

Sincerely yours,

AUSTIN SMITH, M.D.

STATEMENT OF THE AMERICAN COUNCIL ON EDUCATION

The American Council on Education represents 1,100 institutions of higher education and 224 national organizations in higher education. Included in its membership are all universities with accredited schools of medicine and most of the accredited schools of medicine independent of any university connection. The council supports the major provisions of H.R. 3141, believing that these provisions are essential supplements to the assistance provided by the Health Professions Educational Assistance Act of 1963.

Of special importance, we believe, is the provision in part E of H.R. 3141 which would make available to medical schools formula grants in support of their educational programs. These grants would be beneficial in many ways. For schools struggling to maintain acceptable standards with inadequate budgets it is not an exaggeration to suggest that the grants could be the transfusion that will save their lives. For the handful of outstanding schools whose financial problems are slightly less acute the grants would provide funds for continued pioneering and the leadership through which they can strengthen all of medical education. Beyond this, however, the provisions of part E are essential if medical schools are to expand sufficiently to maintain even our present doctor-to-population ratio. Without Federal support as a supplement to existing private and State sources, we do not see how the necessary expansion can be achieved. In short, we believe that the formula grants will help our schools reach two equally important objectives: improvement in quality and increase in output.

We also endorse enthusiastically the provisions in part F which would provide scholarship grants to students, or potential students, who need financial assistance to enter the medical profession. There is abundant evidence, unhappily for the profession, that the high cost of medical education is, in general, limiting enrollment to students who come from upper-middle and high-income families. The effect of removing the financial barriers to medical education was demonstrated after World War II, when the GI bill provided assistance to students regardless of their means. Probably never before or since has the quality of student body or the resultant quality of medical school graduates been equalled. The provisions of section F could bring that time back and, with a relatively small investment of Federal funds, provide rich dividends in terms of both quality and quantity.

The council respectfully urges the approval of H.R. 3141.

AMERICAN ASSOCIATION OF COLLEGES OF PODIATRY,
Cleveland, Ohio, June 7, 1965.

Hon. OREN HARRIS,
House Office Building,
Washington, D.C.

DEAR MR. HARRIS: The following statement is being presented to your committee for inclusion in the record of the hearings on H.R. 3141 and related legislation:

The need of podiatric education increases each day with the ever-increasing population. Surveys of schoolchildren, industrial workers, professional workers, members of the Armed Forces, and aged persons show an ever-increasing number of foot ailments. The purpose of podiatry colleges is to educate podiatrists to provide the much needed services of the community. In order to accomplish this purpose, we find that a program designed specifically to provide each student with those opportunities which will fit him: (1) To master the basic concepts underlying medical knowledge and procedure, (2) to apply these principles fully in the diagnosis and management of the many challenging problems relating to the health and diseases of the foot, (3) to acquire the practice of sound reasoning and critical judgment through experience, (4) to understand the importance of a mind alert to the judicial acceptance of new ideas and to the dismissal of outdated information, (5) to recognize the value of winning the trust and confidence of colleagues, patients, and friends, (6) to gain a full understanding of professional ethics, and finally (7) to develop in addition to professional competence the compassion, tolerance, and zeal which demonstrate a true reverence for life.

This program has become a complex five-step program, patterned to fit congruously with those of other schools that teach the healing arts (i.e. medicine, dentistry, osteopathy). These are the only four branches of the healing arts that are licensed to treat human beings by medical and surgical means. The establishment of departments in the basic sciences and courses in the basic sciences administered and conducted by personnel qualified in these particular sciences is stressed. Clinical facilities and clinical opportunities under the guidance of professional clinicians are a most important part of our program. The podiatry colleges recognize that research is the key to producing a better and higher professional education.

It is nearly impossible today to maintain a good professional program as this without the benefit of the tax dollar, heavy endowments, and assistance from Government agencies. We are not satisfied with podiatry education or with our own accomplishments. We are satisfied with the direction that podiatry is moving and will ultimately satisfy the greatest needs of the community. Through basic research, departmental management by qualified personnel, graduate and postgraduate education and establishment of clinical facilities second to no profession in the United States, podiatry shall move ahead and take its rightly deserved chair among the practitioners of the healing arts.

Only in this way can we begin to meet the health manpower needs of the Nation and maintain the quality of the education of these vital people.

Very truly yours,

M. M. POMERANTZ, M.D., *President.*

DIVISION OF NEUROLOGY,
STANFORD MEDICAL SCHOOL,
Palo Alto, Calif., June 7, 1965.

Representative OREN HARRIS,
House Office Building,
Washington, D.C.

DEAR REPRESENTATIVE HARRIS: I understand that hearings of the Committee on Interstate and Foreign Commerce on a bill that would authorize scholarships and increased loan funds to medical students will begin soon. I feel such legislation is desirable and necessary and I am willing to provide information supporting this position. I have contacted Lister Hill, one of the authors of this bill, and he advised me that you are the chairman of the committee concerned and would be interested in information about medical student needs.

I was the delegate of Stanford Medical School to the Student American Medical Association Convention in Chicago last month. The Stanford chapter of this organization polled its membership on this issue (of Federal scholarships) and found that about 97 percent were in favor of increased loans and Federal scholarships for medical students. At the convention a resolution was adopted recognizing the need for increased financial aid for medical students and favoring the establishment of an agency to administer funds from all sources (including private and Government). An amendment was added to this resolution calling for a poll of the membership on the specific issue of Federal scholarships. When this poll will be taken I'm not sure, but a poll of the national membership taken by our chapter showed that the medical students were overwhelmingly in favor of Federal scholarships. I was informed by Dr. Lee Powers, of the American Association of Medical Colleges, that a poll taken by his organization also showed that medical students were in favor of Federal scholarships.

If you would like me to send you some of the information I have gleaned for the use of the committee I would be glad to do so. Please let me know.

Sincerely,

HOWARD L. FIELDS.

(Whereupon, at 3:55 p.m., the committee was adjourned.)

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